NOTICE

All drawings located at the end of the document.

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Demolition Plan
for
Building 123 Demolition Project

February 12, 1998

Prepared by:
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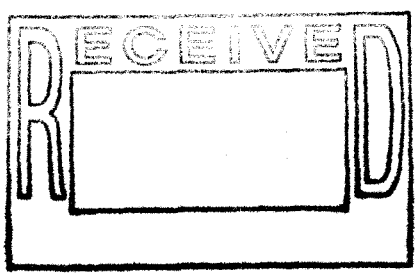

DWRC Denver West Remediation and Construction, L.L.C.
... restoring the environment

Demolition Plan
for
Building 123 Demolition Project
Rocky Flats Environmental Technology Site

Prepared by

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Ricky J. Carr, DWRC Safety and Health Manager

Kaiser-Hill Project Manager 2/18/98 Date

TABLE OF CONTENTS

1 INTRODUCTION

The Demolition Plan (Plan) outlines the approach that will be taken and the applicable precautions that will be utilized in the demolition of Building 123. The Plan details the methods to be used, equipment, and sequencing. Utilities isolation and waste handling requirements are also discussed. The sequence of demolition is outlined in Section 2. Since coordination is imperative for the building demolition, all activities will be scheduled and discussed at a daily Plan of the Day meeting. All demolition activities will be performed in accordance with applicable environmental regulations (See Attachment 7.6)

2 METHODS, EQUIPMENT, and SEQUENCE of DEMOLITION ACTIVITIES

This section provides descriptions of the methods and equipment to be used for each strip-out activity and the sequence of operation. These methods are meant to show compliance with 29 CFR 1926, Subpart T, Demolition and compliance with National Fire Protection Association (NFPA), Safeguarding Construction, Alteration and Demolition Operations. Special emphasis will be on the following items in the Demolition Health and Safety Plan and its associated Activity Hazards Analysis (Ref 6.1).

- Prevent fire hazards and plan for limiting, abating, or mitigating fire hazards. Daily inspections will be conducted and documented by the Construction Superintendent and the Site Health and Safety Representative. Discrepancies found will be mitigated immediately.

- Separate temporary structures having combustible contents from existing structures. Any temporary structures, such as temporary offices, trailers, and other facilities for the storage of tools and materials having combustible construction or content shall have a minimum separation distance of 30 feet from the construction area.

- Provide fire protection for temporary enclosures. Temporary enclosures shall be equipped with a minimum of one fire extinguisher suitable for the classes of fires expected inside the enclosure.

- Manage internal combustion engines and associated equipment for fire prevention. Internal combustion engines and associated equipment shall not be located within the structure when used and shall have a minimum clearance of at least 9 inches from combustible material. The engine will be shutdown and allowed to cool prior to refueling. Service area for the equipment shall not be located inside Building 123. Fuel will not be stored inside Building 123.

- Use fire prevention for temporary heating, lighting and power. Ensure that the temporary heating and lighting is installed in accordance with the manufacture's recommendations including spacing near combustibles. After the temporary systems have been installed, if necessary, the fire department shall be requested to review the building for fire protection issues.

- Disseminate work policy for smoking. Smoking shall not be permitted in Building 123 in preparation for and during demolition. Smoking shall be permitted outside the construction area in designated areas and safe receptacles for smoking materials shall be provided.

- Store and handle flammable and combustible liquids, gases, and waste safely. Flammable and combustible liquids, gases will be handled and stored in accordance with HSP 32.01.

- Provide access for fire fighting activities. The construction trailer at Building 123 shall be designated as the command post and will contain the necessary plans, emergency information and equipment, as needed. Access to Building 123 for fire fighting equipment will be through the southwest door. There is a fire hydrant near the door for a source of water. There is also a fire hydrant located across the street near the north east corner of the building and access will be through the main entrance. The hallways of the building will be kept clear to allow access throughout the building.

- The fire protection system will have been drained during the strip out phase of the task. There should be no requirement for temporary heating of the existing fire protection system.

Waste handling will be done in accordance with Section 4 of this plan.

Protection of personnel during the demolition work will be continuously evaluated as part of routine planning and execution. The project safety plans will address worker safety through the Activity Hazard Analyses (AHA) which evaluate worker and take preventive and mitigating actions to protect all personnel working in and around the work site. The training requirements for demolition are outlined in Attachment 7.2.

Equipment and material removal will be conducted in a manner to prevent collapse or unplanned failures while workmen remove debris and perform other work in the immediate area. A Hoisting and Rigging Checklist will be used to remove large equipment as necessary.

It is anticipated that all work involving manual demolition of lead painted surfaces will be completed prior to the work prescribed in this plan. However, if circumstances dictate, all lead abatement work shall be in accordance with the requirements of 29CFR1926.62 and the Denver West Remediation and Construction (DWRC) approved Lead Compliance Plan.

The overall sequence of activities is as identified on the project schedule, Attachment 7.4.

2.1 Removal of Other Miscellaneous Items

Drain all oil from pumps, fans, motors, and air conditioner compressors. The waste oil shall be handled as directed by the Contractor (Kaiser-Hill) and as stated in the IWCP.

Remove and dispose of the following equipment as directed by the Contractor:

- Removal of transformers from rooms 123A, 132, 159.

- Bathroom sinks

- Ceiling tiles, supporting grid, light fixtures, light ballasts, and light bulbs in Building 113

5

- Refrigerators

Radiological survey requirements will be delineated in the applicable Property/Waste Release Evaluation prior to final disposition.

2.1.1 Removal of Transformers in Rooms 123A, 132, 159

Verify that the power has been terminated to the transformers to be removed. Prior to removal of this equipment, Building 123 shall be de-energized with the appropriate Lock-Out/Tag-Outs (LO/TOs) are place.

The transformers shall be disposed of as industrial waste.

2.1.2 Bathroom sinks

Bathroom sinks shall be removed and disposed of as industrial waste. Services to the sinks have been isolated and verified as part of building deactivation.

2.1.3 Ceiling tile, support grid, light fixtures, light ballasts, and light bulbs

All ceiling tiles, support grid, light fixtures, light ballasts, and light bulbs shall be removed from Building 113, 114, and 123S. The ceiling tiles are not considered to be Asbestos Containing Material (ACM).

Handle the light bulbs, ballasts and fixtures as described below.

Fixtures: Verify that all power has either been terminated or locked-out/tagged-out before removing light fixtures The fixtures shall be handled as an industrial waste after the bulbs and ballasts have been removed.

Ballasts: Each ballast shall be inspected for Poly Chlorinated Biphenyl (PCB) labeling. Sampling is not required. The light ballasts shall be separated depending upon their labeling. All ballasts marked "PCB free" or "no PCBs" will be managed as non-PCB, non-hazardous solid waste. Light ballasts without markings will be managed as PCB waste and packaged as specified in Section 4 of this plan. PCB ballast's shall be packaged separately from non-PCB ballasts.

Bulbs: Fluorescent and incandescent light bulbs are hazardous waste. All fluorescent and incandescent light bulbs will be packaged in cardboard boxes. Fluorescent and incandescent light bulbs will be packaged separately. The boxes of fluorescent and incandescent light bulbs will be transported and disposed of by the Contractor as a hazardous waste.

2.1.4 Refrigerators

The refrigerators will be drained of freon and compressor oil by qualified personnel. They will be disposed of as industrial waste.

2.2 Demolition of Buildings 123, 123S, 113, 114

These buildings will be demolished after all utilities are isolated and after all miscellaneous items have been removed form the buildings. This work will be scheduled for a weekend when little traffic is present on the roads around these buildings. Before start of demolition, the roads around these buildings will be blocked with the approval of the security guards and the shift superintendent (See Attachment 7.5). A construction barrier will be set up to prevent non-workers from entering the demolition area. The mechanical equipment will be a 235 Cat, or equivalent equipment, equipped with a grapple. Debris generated by the demolition will be disposed of as rubble. The rubble will be loaded onto a roll-off and disposed of in accordance with Section 4 of this plan.

2.2.1 Protection of property

Necessary precautions to avoid damage to existing items to remain in place as the property of the Contractor shall be taken. The demolition work shall be coordinated with other work and shoring, supports, and bracing shall be constructed as necessary prior to demolition. The Subcontractor's qualified Structural Engineer shall ensure that unplanned overloading of structural elements does not occur. If any shoring or bracing is determined to be necessary, a plan shall be developed by the Subcontractor's qualified Structural Engineer which shall be reviewed and approved by the Contractor prior to implementation.

Protect all coniferous trees around Building 123. Trees within the construction site which may be damaged during demolition and which have been indicated to be left in place shall be protected by a fence or other suitable barrier. Trees designated to be left in place that are damaged during the work shall be replaced in kind or as approved by the Contractor.

2.2.2 Demolition of Building 123

Building 123 has four separate construction entities: the Original East-North Wing (circa.1952), the First East Wing Addition (circa. 1968), the West Wing Addition (circa. 1972), and the Second East Wing Addition (circa. 1974). Drawings (Attachment 7.1) are provided for information.

The Original East-North Wing is a single story, L-shaped, concrete masonry structure. It contains Rooms 100 through 135. The north-facing, exterior wall (north wall) runs parallel to Central Avenue and the east-facing wall (east wall) runs parallel to Fourth Street. Each wall is approximately 150 feet long and 18 feet high. The width of each wing unit is approximately 50 feet. The north wall sets back approximately 40 feet from Central Avenue and 20 feet from the row of large evergreen trees, which will be protected during demolition activities. The east wall sets back 30 feet from Fourth Avenue but is only 6 to 10 feet away form the utility rack carrying air, steam and condensate piping. During demolition, these utilities will be protected in accordance with Section 3.3 of this plan.

The roof structure consists of cast-in-place concrete slab and beam construction supported by interior reinforced concrete columns. The foundation consists of conventional spread footings and isolated pad footings founded below the frost line.

The First East-Wing Addition is located at the southeast corner of the east wall, near the intersection of Fourth Street and Cottonwood Avenue. Its rectangular shape (32'by 61') increases the length of the east wall by 32 feet. It contains Rooms 139 through 151. The walls are constructed with reinforced, 8-inch concrete blocks filled with grout in the cells having reinforcing rods. The walls do not carry the roof load. Rather, the roof load is carried to the foundation through an independent truss-beam-column system. Eight 4-inch tubular steel columns evenly spaced along the north and south walls are tied together with I-beams. The open-web steel joists rest on the I-beams and span the 32-foot building width. The built-up roof consists of Robertson "Q" decks with a light concrete topping. The foundation consists of conventional spread footings and isolated pad footings founded below the frost line.

The Second East Wing Addition attaches to the south side of the First East Wing Addition. Its rectangular shape (15' by 28') adds 15 feet to the length of the east wall in the southern direction. It contains Room 165. The walls are constructed with concrete block filled with grout in the cells having reinforcement rods. The roof load is carried by the east and west walls. Open-web, steel joists span across the east and west walls (approximately 28'). The built-up roof consists of a metal deck, concrete topping, rigid insulation, plywood, and a waterproof membrane. It slopes downward towards the east. The foundation consists of conventional spread footings and isolated pad footings founded below the frost line.

The West Wing Addition attaches to the southwest corner of the north wing. Its rectangular shape (95'by 42') adds 95 feet to the north wing in southern direction, causing the building outline to be U-shaped. It contains Rooms 154 through 163. The walls are constructed with reinforced concrete block, with grout filling the cells having reinforcing bars. The roof is made up of 12 twin tees with lightweight concrete topping. The twin tees span the east and west walls, which carry the roof load to the foundation. The foundation consists of conventional spread footings and isolated pad footings founded below the frost line.

Prior to starting any demolition, a chain link fence (already in place) will be constructed around the perimeter of the building to prevent unauthorized entry into the work area. The east exterior wall next to the utility rack will be braced to prevent unplanned wall collapse, and plywood guards will be erected to prevent debris from hitting the utility piping. A bracing plan will be submitted to the Contractor prior to starting demolition per Section 2.2.1 of this plan. A fire hose will be connected to a fire hydrant for spraying during demolition to mitigate dust re-suspension (See Addendum 1). Surface water discharge control programs are in place to control the quality of water released at the Rocky Flats Environmental Technology Site (RFETS). A silt screen fence will be erected around the building perimeter to limit soil erosion and runoff. A spotter will be stationed to observe and warn the equipment operators of unsafe conditions and to prevent the equipment from contacting the utility rack, power lines or protected property.

Demolition of Building 123 will begin at the West Wing. This will allow an area for staging waste containers for the remaining portions of Building 123 (See Addendum 2). A 235 Cat, or similar piece of equipment, equipped with a grapple be used to demolish this addition. Tracked equipment will be used to minimize breakdowns due to flat tires. Demolition will start at the southeast corner and will proceed west and north up to the north wing of the Original East-North Wing structure.

The north wing of the Original East-North Wing structure will be demolished after the West Wing Addition. Two Cats (225 or 235), or similar pieces of equipment, equipped with hydraulic hammers will be used to demolish the original building structure. Tracked equipment will be

used to minimize breakdowns due to flat tires. Demolition will start at the west wall simultaneously and will proceed east.

The Second East Addition will be demolished after the North Wing. A 235 Cat, or similar piece of equipment, equipped with a grapple will be used to demolish this addition. Tracked equipment will be used to minimize breakdowns due to flat tires. Demolition will start at the southwest corner and proceed east and north. The east wall will be pulled into the building interior to prevent any debris from contacting the utility rack. All rubble will be loaded into waste roll-offs for transport to the off-site disposal location.

The First East Addition will be demolished next. A 235 Cat, or similar piece of equipment, equipped with a grapple will be used to demolish this addition. Tracked equipment will be used to minimize breakdowns due to flat tires. Demolition will start at the southwest corner and proceed east and north. The east wall will be pulled into the center of the building to prevent any debris from contacting the utility rack. All rubble will be loaded into waste roll-offs for transport to the off-site disposal location.

The east wing of the Original East-North Wing structure will be demolished next. Two Cats (225 or 235), or similar pieces of equipment, equipped with hydraulic hammers will be used to demolish the original building structure. Tracked equipment will be used to minimize breakdowns due to flat tires. Demolition will start at the southwest corner and at the west wall simultaneously. Demolition will proceed east and north.

The sequence of demolition for Building 123 will follow the general approach outline above. However, if field conditions warrant a change, this sequence will be revised to reflect those changes prior to continuing work.

2.2.3 Demolition of Building 123S

Building 123S is a hazardous waste storage building located on a concrete slab on the south side of Building 123. The building is approximately 90 square feet and is of sheet metal construction founded on conventional spread footings and slab on grade. All hazardous material has been removed by the Contractor. The drawings (Attachment 7.1) provide a layout of the building.

This building will be demolished after all utilities are isolated and after all miscellaneous items have been removed form the buildings. This work will be scheduled for a weekend when little traffic is present on the roads around these buildings. Before start of demolition, the roads around these buildings will be blocked with the approval of the security force and the shift superintendent. A construction barrier will be set up to prevent non-workers from entering the demolition area. The mechanical equipment will be a 235 Cat, or similar piece of equipment, equipped with a grapple. The rubble will be loaded onto a roll-off and disposed of in accordance with Section 4 of this plan.

2.2.4 Demolition of Building 113

Building 113 is a concrete masonry unit with a flat roof with light gage metal decking over metal bar joist. It encloses approximately 325 square feet. The foundation consists of conventional spread footings and isolated pad footings founded below the frost line. No internal processes are located within, and it was originally a guard post. Drawings (Attachment 7.1) are provided for information. This building will be demolished after all utilities are isolated and after all

miscellaneous items have been removed from the building. This work will be scheduled for a weekend when little traffic is present on the roads around these buildings. Before start of demolition, the roads around these buildings will be blocked with the approval of the security force and the shift superintendent. A construction barrier will be set up to prevent non-workers from entering the demolition area. The mechanical equipment will be a 235 Cat, or similar piece of equipment, equipped with a grapple. The rubble will be loaded into a roll-off and disposed of in accordance with Section 4 of this plan.

2.2.5 Demolition of Building 114

Building 114 is a bus shelter enclosing approximately 25 square feet. It is constructed of concrete blocks and it has a flat roof.

This building will be demolished after all miscellaneous items have been removed from the building. This work will be scheduled for a weekend when little traffic is present on the roads around these buildings. Before start of demolition, the roads around these buildings will be blocked with the approval of the security guards and the shift superintendent. A construction barrier will be set up to prevent non-workers from entering the demolition area. The mechanical equipment will be a 235 Cat, or similar piece of equipment, equipped with a grapple. The rubble will be loaded into a roll-off and disposed of in accordance with Section 4 of this plan.

3 UTILITY ISOLATION

Disconnection of utility services is specified below. All existing utilities shall be disconnected prior to demolition. When utility lines are encountered that are not indicated on the drawings, the Contractor (Kaiser-Hill) shall be notified immediately prior to further work in that area. All pipe and conduit that penetrate the building slab shall be capped as the pipe/conduit is stripped out. All utility isolation shall be closely coordinated with the Contractor (Kaiser-Hill), and shall be locked out and tagged out in accordance with Rocky Flats Environmental Technology Site (RFETS) procedures and as specified in the Integrated Work Control Program (IWCP) work instructions. Any excavation work necessary for utility isolation shall be done in accordance with the project Soil Disturbance Permit. This is a Rocky Flats specific permit, which specifies sampling and controls for excavation activities.

3.1 Building 113.

The only utilities that service Building 113 are power and communications/Local Area Network (LAN) System. Power shall be terminated, and the communications system shall be isolated and stripped out prior to demolition.Building 114. There are no utilities associated with Building 114.

3.3 Building 123.

The following utilities shall be isolated, locked and tagged out per procedures, and removed from service per Project Specifications prior to demolition:

- Power
- Domestic Water/Fire Water
- Fire Alarms
- Natural Gas
- Steam and Condensate
- Plant Air
- Process Waste
- Communication/LAN

The remaining utilities in the utility rack on the east side of B 123 will be protected during demolition activities. The methods of protection will include bracing along the east wall of Building 123 and shielding of the pipe rack. A bracing plan will be issued prior to implementation per Section 2.2.1 of this plan. The bracing will consist of angle braces sufficient to prevent collapse of the wall to the east. The utilities in the pipe rack will be protected by shielding them with wood. This will prevent damage from demolition debris.

Prior to demolition, an exclusion area will be established to ensure worker safety. The excluded area will be from Fourth Street to the east wall. A spotter will be used to observe and warn the equipment operators of unsafe conditions and to prevent the equipment from contacting the utility rack.

The physical precautions described above are anticipated to be sufficient to safeguard the utility rack. However, for additional protection the utilities (air, steam, and condensate) may be de-energized or an alternative measure may be used. Specifically, the alternative measure preferred is to station a Stationary Operating Engineer (SOE) on the job during the east wall demolition to be in a position for quick isolation of systems if necessary. The SOE will be in communication with the DWRC Construction Superintendent during demolition activity.

3.2 Building 123S.

There are no utilities associated with Building 123S.

4 WASTE HANDLING

This section describes the types of waste that will be generated and how they will be handled and disposed of. Waste materials will be separated and segregated in order to facilitate radiological contamination surveys and subsequent packaging.

4.1 Hazardous Waste

Hazardous waste that will be generated during the Building 123 Demolition Project includes fluorescent and incandescent light bulbs. Fluorescent and incandescent light bulbs will be packaged separately in cardboard boxes and turned over to the Contractor (Kaiser-Hill).

4.2 Toxic Substance Control Act (TSCA) Waste

TSCA waste expected to be generated during the Building 123 Demolition Project include light ballasts that are not labeled as PCB free. Light ballasts that are not PCB free will be packaged in Building 123 into lined 55-gallon drums as TSCA waste and eventually shipped to the EnviroCare disposal site in Utah.

4.3 Low-Level Radioactive Waste

No Low-Level radioactive waste will be generated during B123 Demolition.

4.4 Mixed Waste

No Mixed waste will be generated during the Building 123 Demolition

4.5 Sanitary Waste

Sanitary (Industrial) waste that will be generated during the Building 123 Demolition Project includes any other waste materials that do not meet the criteria for any of the other waste streams. This is expected to include all demolition debris, ceiling tiles, cabinets, white boards, bulletin boards, signs, and other similar materials. Sanitary wastes will be loaded into roll-offs provided by the Contractor (Kaiser-Hill) and the Contractor (Kaiser-Hill) will be responsible for transportation of the roll-offs to the USA Waste landfill in Erie, CO.

4.6 Asbestos Waste

No asbestos waste will be generated during building demolition. All asbestos containing materials will be abated prior to initiation of any demolition activities.

Table 4-1
Estimated Quantities of Waste Materials

Type of Waste Material	Estimated quantity	Storage or disposal location
TSCA Waste	<1 cu yd	Unit 1 or 10
Low-level radioactive waste	0 cu yd	B664 or B440 Cargo Containers
Mixed Waste	0 cu yd	To be determined by Contractor (Kaiser-Hill)
Sanitary Waste	3500 cu yd	USA Waste
Asbestos Waste	0 cu yd	N/A

5 COORDINATION WITH OTHER WORK IN PROGRESS

Work will be conducted in accordance with the approved activity schedule (Attachment 7.4). DWRC will coordinate and arrange for delivery of waste crates, traffic control, radiological support and other site service groups to coordinate demolition activities. All activities will be scheduled on the Building 123 Plan of the Day, which will be conducted by the Subcontractor, Rocky Mountain Remediation Services (RMRS).

REFERENCES

6.1 Demolition Health and Safety Plan

6.2 DWRC Qualification and Training Matrix

6.3 RFETS Radiological Control Manual

6.4 RFETS Health and Safety Manual

7 ATTACHMENTS

7.1 Drawings

7.2 Training and Qualifications for B123 Demolition

7.3 Level 4 Activity Schedule, Rev 2

7.4 Addendum 1 – Ambient Air Monitoring

7.5 Addendum 2 – B123 Traffic Plan

7.6 Regulatory Matters

ADDENDUM 1

Ambient Air Monitoring

The existing Site Radioactive Ambient Air Monitoring Program (RAAMP) sampler network will be utilized for ambient air monitoring during the Building 123 Cluster demolition. The RAAMP sampler network continuously monitors airborne dispersion of radioactive materials from the Site into the surrounding environment. Thirty-one samplers comprise the RAAMP network. Twelve of these samplers are deployed at the Site perimeter and are used for confirmatory measurements of off-Site impacts. Filters from these 12 RAAMP monitors located at the Site perimeter and from one on-Site sampler are collected and analyzed monthly for uranium, plutonium, and americium isotopes. The others 18 samplers are used for backup, should there be a need for enhanced monitoring to determine local impacts from specific projects.

The Building 123 Cluster demolition phase will not be a significant source of radionuclide emissions, and will not warrant enhanced radioactive ambient air monitoring. This determination is based on the following:

The Close-Out Radiological Survey Plan for the Building 123 Cluster

The Close-Out Radiological Survey Plan for the Building 123 Cluster defines the methods that will be utilized to ensure that radioactive contamination in the Building 123 Cluster is below unrestricted release criteria levels established in the Final Rocky Flats Cleanup Agreement, prior to commencement of demolition activities. The surveys that will be performed for the Building 123 Cluster will include floors, interior wall surfaces, accessible surfaces of the roof, exterior wall surfaces, and fixed equipment. If the surveys show that portions of the 123 Cluster do not meet the unrestricted release criteria, the area will be decontaminated or removed prior to demolition. This survey plan will ensure that demolition activities will have minimal potential for radionuclide emissions.

The Soil Disturbance Site Survey/Sampling Report

The Soil Disturbance Site Survey/Sampling Report for the soils surrounding Building 123 indicates that the soils are not radiologically contaminated above the Tier II action levels (well below 50% of the Tier II levels) established in the Final Rocky Flats Cleanup Agreement. This means that soil radionuclide contaminant levels are low enough that remediation and/or management actions are not required to protect human health and ecological resources. Thus, soil disturbance associated with the Building 123 Cluster demolition will have minimal potential for radionuclide emissions.

Particulate Emissions Control Measures For Building 123 Demolition

Colorado Air Quality Control Commission (CAQCC) Regulation Number 1 (Reg. 1) requires that certain, specific types of sources utilize control measures and operational procedures which are technologically feasible and economically reasonable to minimize fugitive particulate emissions into the atmosphere. For the Building 123 Cluster demolition project, these activities include building demolition, and haul roads and haul trucks associated with the building demolition. The following is a list of control measures and/or procedures that will be utilized to minimize fugitive particulate emissions from the Building 123 Cluster demolition activities.

A fire hose will be connected to a fire hydrant and will be utilized for pre-watering of the work surface prior to demolition, for watering down the rubble during demolition activities, and for watering down the ground area around Building 123 where tracked equipment will be operating.

All rubble from the Building 123 Cluster demolition will be loaded into waste roll-off containers for transport to off-Site disposal locations. The roll-off containers will be covered with tarps, which will control fugitive dust emissions from the haul trucks during transport.

Material deposited on paved haul roads as a result of the Building 123 demolition project will be removed if the spread of dust from those deposits creates a nuisance in the surrounding area.

Demolition activities will be terminated when wind speeds reach levels warranting action as determined by the RFETS Shift Superintendent and DWRC Safety and Health Personnel.

Attachment 7.6

Regulatory Matters

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). All work will be conducted in accordance with the approved Proposed Action Memorandum (PAM). The Colorado Department of Public Health and Environment on August 25, 1997 approved the PAM.

Clean Air Act (CAA). Control of fugitive dust during demolition will be by water spray to limit dust generation and airborne excursions (See Addendum 1).

Clean Water Act (CWA). The Contractor (Kaiser-Hill) routinely conducts surface water monitoring as required by the CWA and National Pollutants Discharge Emissions System (NPDES) permit. Discharge of liquid to the environment will be through normal drainage to the ponds. In addition, a silt fence will be erected around B123 to limit soil erosion and runoff.

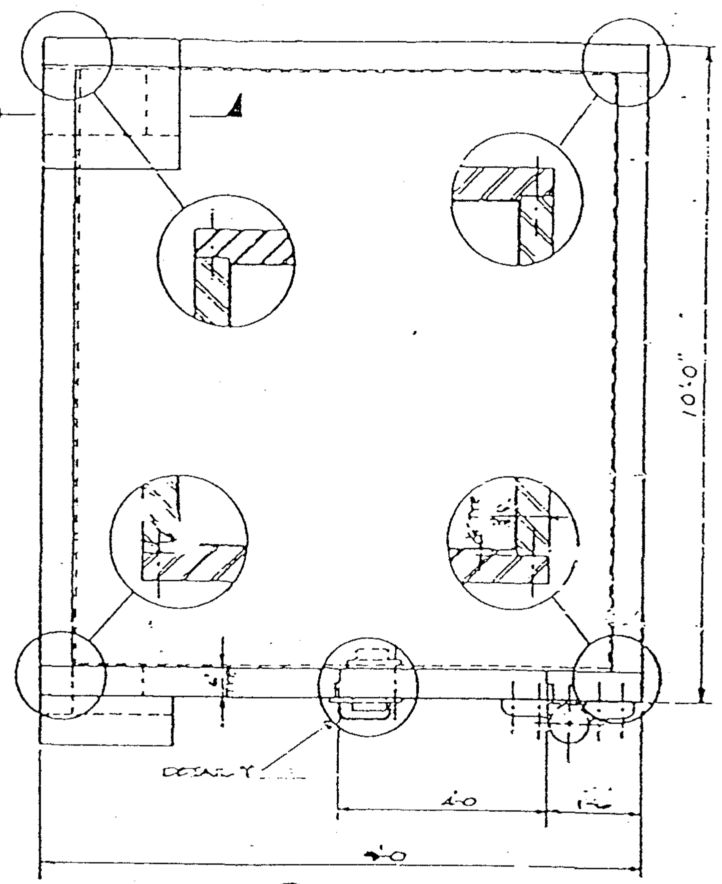
The Contractor (Kaiser-Hill) will be notified immediately of all spills, including any release of hydraulic fluid, oil, antifreeze, gasoline or other material. The contractor is responsible for appropriate reporting to DOE, site organizations, and regulatory agencies. Pollution and erosion controls will be implemented during construction activities to mitigate impacts on air, water, and other environmental resources and to assure compliance with Federal, State and local laws and regulations. Use of explosives will not be permitted.

Occupational Safety and Health Act (OSHA). All demolition tasks will be conducted in accordance with 29 CFR 1926, Subpart T, and National Fire Protection Association (NFPA) 241. The subcontractor is responsible for complying with all permits, both internal and external to RFETS.

Resource Conservation and Recovery Act (RCRA). The Building 123 portion of RCRA Unit 40 will be closed prior to demolition. All hazardous waste was characterized in accordance with RCRA requirements.

Toxic Substance Control Act (TSCA). All asbestos containing materials (RFETS Spec No. 02082) shall be removed from the buildings prior to demolition according to applicable regulations (Colorado Reg. 8 and 29CFR1926.1101) and requirements. Light ballast's and transformers shall be inspected for PCB's (RFETS Spec No. 02075) and removed from the building prior to demolition.

Radiation Protection of the Public and Environment (DOE Order 5400.5 and RFETS Radiological Controls Manual). Demolition will not proceed until final radiological surveys have been completed and verified.



PLAN
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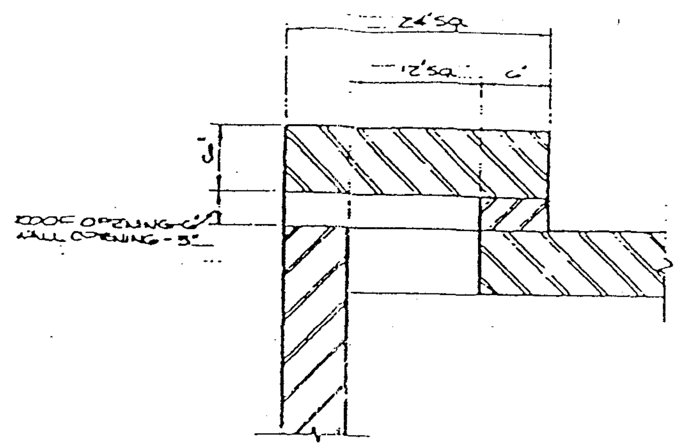

SECTION-A
SHIELDED OPENING
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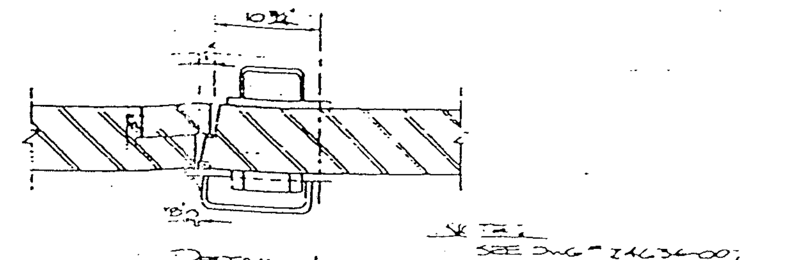

DETAIL-1
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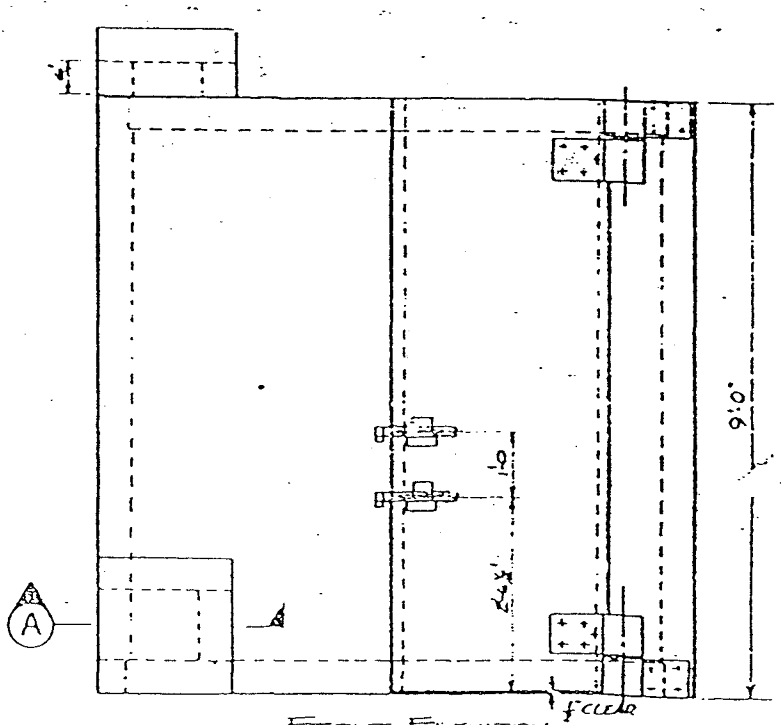
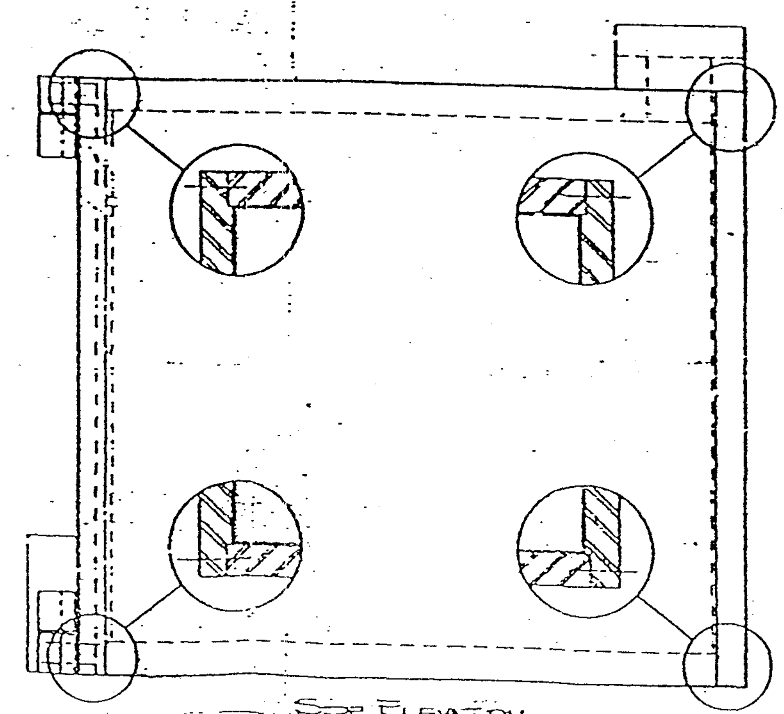


FRONT ELEVATION
SCALE 3/4"=1'-0



SIDE ELEVATION
SCALE 3/4"=1'-0

GENERAL NOTES

STEEL ROOM SHALL BE GOVERNMENT FURNISHED EQUIPMENT, TO BE ERECTED IN THE FIELD BY THE CONTRACTOR.

1. THE CONTRACTOR SHALL FURNISH & INSTALL A LINING ON ALL INTERIOR SURFACES, CONSISTING OF 1/8 THK. LEAD, 0.024-0.001 IN. TIN & 0.010-0.001 IN. ZINC LISTED RESPECTIVELY FROM THE STEEL SURFACE. THE LINING SHALL BE ATTACHED TO ALL SURFACES BY MECHANICAL MEANS IN ACCORDANCE WITH THE SPECIFICATIONS.

2. THE CONTRACTOR SHALL FURNISH & INSTALL ALL ELECTRICAL POWER & LIGHTING PER DWG. D-24634-007

3. THE CONTRACTOR SHALL BOLT ALL STEEL PLATES TOGETHER. ALL STEEL PLATES SHALL BE SECURED AT JOINTS WITH 1 INCH DIAMETER x 1" LONG BOLTS SPACED A MAXIMUM OF 18 INCHES CENTER TO CENTER.

4. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL HVAC PER DRAWING D-24630-004

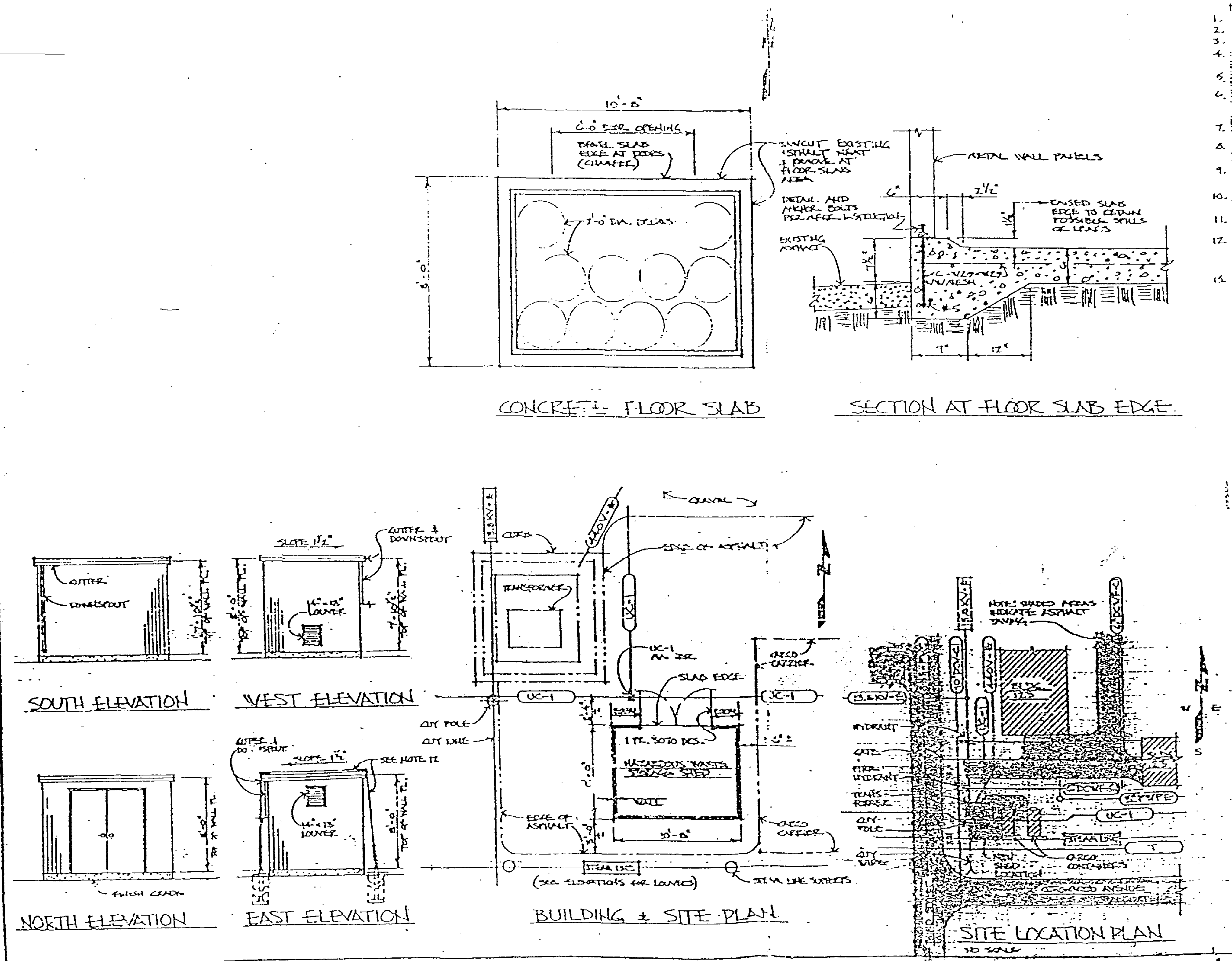
INFORMATION ONLY

B	[illegible]
0	ORIGINAL ISSUE

U.S. ATOMIC ENERGY COMMISSION
ROCKY FLATS AREA OFFICE — GOLDEN, COLORADO

BNL
ARCHITECTS-ENGINEERS
DENVER COLORADO

D

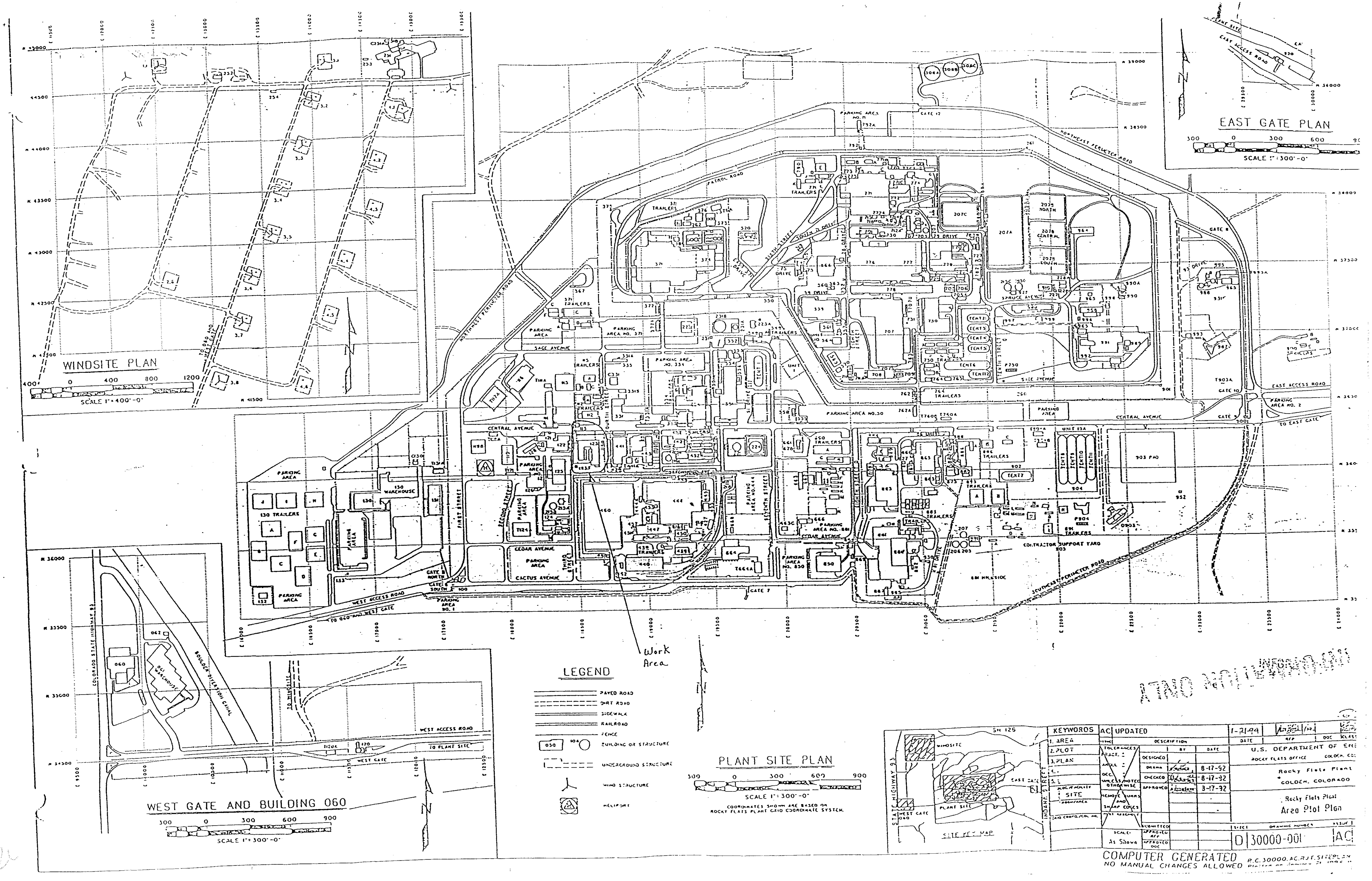


NOTES

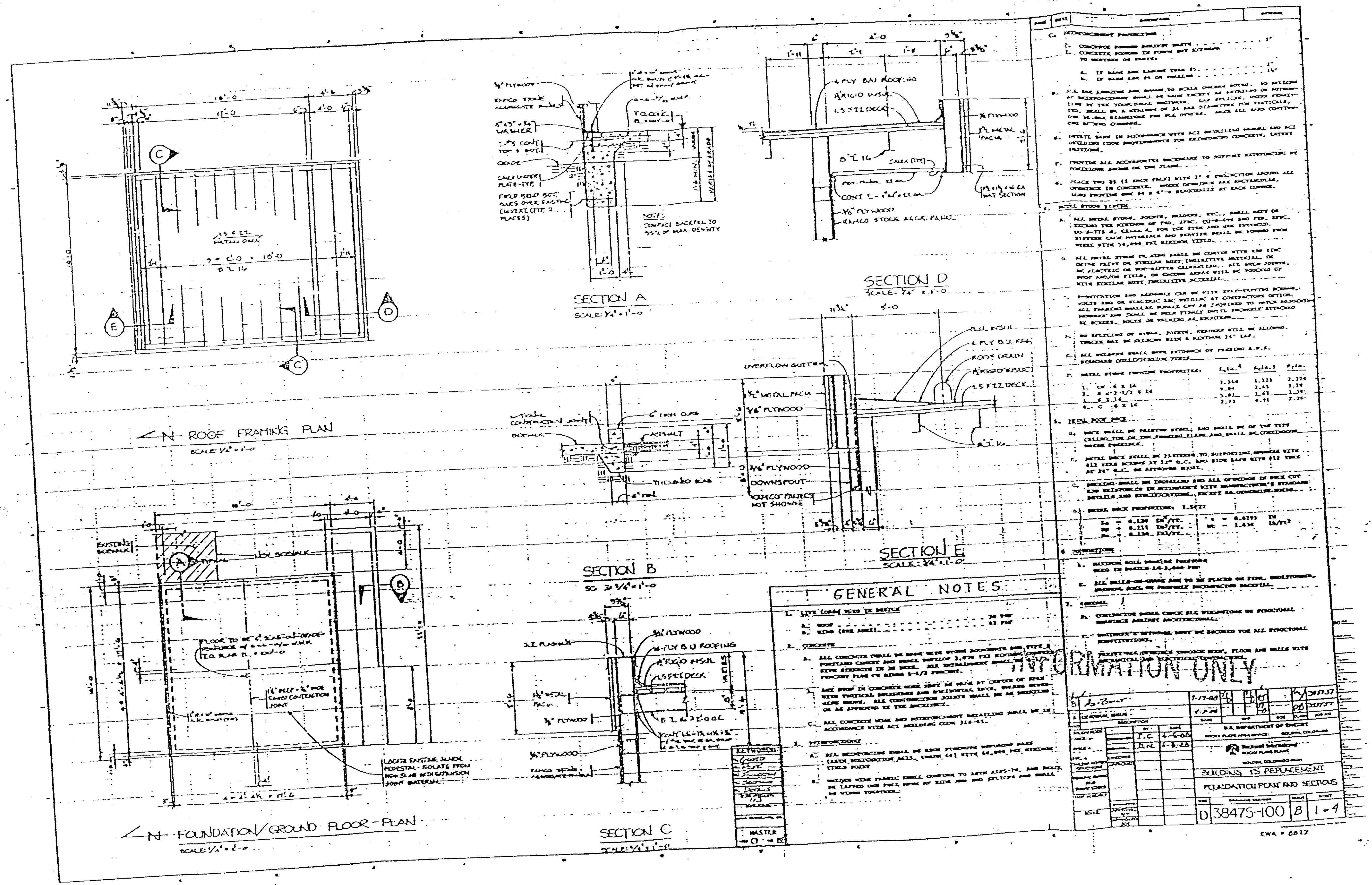
1. ——— — — — INDICATES EXISTING
2. ——————— INDICATES NEW
3. ALL UTILITIES SHOWN ARE EXISTING
4. ALL BOLTS 3/4" Ø - A307 GRADE UNLESS NOTED OTHERWISE AT FLOOR SLAB
5. STEEL TO BE FABRICATED PER AISC LATEST EDITION
6. ALL CONCRETE SHALL BE MADE, PLACED & CURED ACCORDING TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, A.C.I. 318-83
7. ALL REINFORCING SHALL BE ACIS GRADE 60
8. COMPACT SUBGRADE UNDER NEW SLAB TO 95% MODIFIED PROCTOR
9. ALL DETAILS & DESIGN TO BE REVIEWED AND APPROVED BY BUYER
10. ——( )—— DENOTES UNDERGROUND
11. ——[ ]—— DENOTES ABOVE GROUND
12. WIND RESTRAINTS: (OPTIONAL)
    a. CABLES - STEEL WITH WOOD SPACERS
    b. TIE DOWNS FOR TRAILERS PAGE SC-103
13. IF WIND CRITERIA IS MET PER SPECIFICATION 2.1.3 NOTE 12 NOT REQ'D.

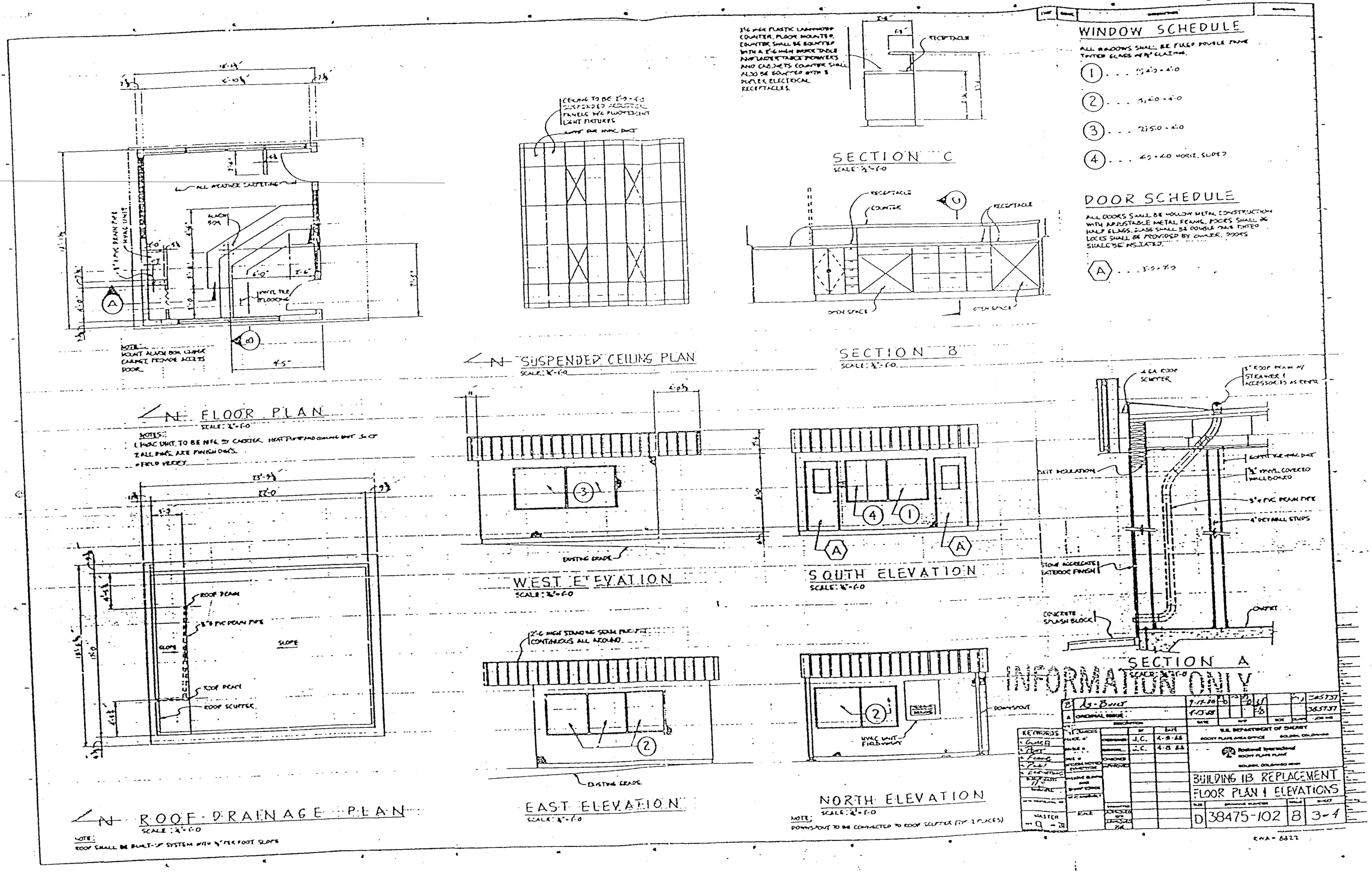
INFORMATION ONLY!

AS BUILT
U.S. DEPARTMENT OF ENERGY
ROCKY FLATS AREA OFFICE GOLDEN, COLORADO
Rockwell International Rocky Flats Plant
HAZARDOUS WASTE STORAGE SHED
BUILDING ITS SITE
D 38046-001 B



WINDSITE PLAN
SCALE 1"=400'-0"
EAST GATE PLAN
SCALE 1"=300'-0"
PLANT SITE PLAN
SCALE 1"=300'-0"
COORDINATES SHOWN ARE BASED ON ROCKY FLATS PLANT GRID COORDINATE SYSTEM.
WEST GATE AND BUILDING 060
SCALE 1"=300'-0"
LEGEND
PAVED ROAD
DIRT ROAD
SIDEWALK
RAILROAD
FENCE
BUILDING OR STRUCTURE
UNDERGROUND STRUCTURE
WIND STRUCTURE
HELIPORT
Work Area
NORTHWEST PERIMETER ROAD
NORTHEAST PERIMETER ROAD
SOUTHEAST PERIMETER ROAD
PATROL ROAD
CENTRAL AVENUE
WEST ACCESS ROAD
EAST ACCESS ROAD
BOULDER DIVERSION CANAL
COLORADO STATE HIGHWAY 93
SITE KEY MAP
KEYWORDS
1. AREA
2. PLOT
3. PLAN
SITE
AC UPDATED
1-21-94
DESCRIPTION
DESIGNED
DRAWN 8-17-92
CHECKED 8-17-92
APPROVED 3-17-92
SCALE: As Shown
U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE
Rocky Flats Plant
GOLDEN, COLORADO
Rocky Flats Plant
Area Plot Plan
D 30000-001 AC
COMPUTER GENERATED
NO MANUAL CHANGES ALLOWED
INFORMATION ONLY


ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0
1.5 E 22 METAL DECK
9 @ 2'-0 = 18'-0
8 Z 16
18'-0
17'-0
SECTION A
SCALE: 3/4" = 1'-0
3/4" PLYWOOD
RANCO STOCK AGGREGATE PANEL
5"x3"x1/4" WASHER
GRADE
NOTE: COMPACT BACKFILL TO 95% OF MAX. DENSITY
SECTION D
SCALE: 3/4" = 1'-0
4 PLY B.U. ROOFING
1.5 F22 DECK
8" Z 16
CAULK (TYP)
3/4" PLYWOOD
RANCO STOCK AGGR. PANEL
SECTION E
SCALE: 3/4" = 1'-0
OVERFLOW GUTTER
3/4" METAL FACIA
3/4" PLYWOOD
DOWNSPOUT
RANCO PANELS NOT SHOWN
B.U. INSUL
4 PLY B.U. RFG
ROOF DRAIN
RIGID INSUL
1.5 F22 DECK
SECTION B
SCALE: 3/4" = 1'-0
TOOL CONTRACTION JOINT
SIDEWALK
ASPHALT
THICKENED SLAB
SECTION C
SCALE: 3/4" = 1'-0
S.I. FLASHING
3/4" PLYWOOD
4 PLY B U ROOFING
RIGID INSUL
1.5 F22 DECK
3/4" PLYWOOD
FOUNDATION/GROUND FLOOR-PLAN
SCALE: 1/4" = 1'-0
EXISTING SIDEWALK
NEW SIDEWALK
FLOOR TO BE 4" SLAB-ON-GRADE
LOCATE EXISTING ALARM PEDESTAL. ISOLATE FROM NEW SLAB WITH EXPANSION JOINT MATERIAL
GENERAL NOTES
KEYWORDS
MASTER
INFORMATION ONLY
BUILDING 115 REPLACEMENT
FOUNDATION PLAN AND SECTIONS
D 38475-100 B 1-4
RWA • 8822


WINDOW SCHEDULE
DOOR SCHEDULE
SECTION C
SECTION B
SECTION A
SUSPENDED CEILING PLAN
FLOOR PLAN
ROOF DRAINAGE PLAN
WEST ELEVATION
SOUTH ELEVATION
EAST ELEVATION
NORTH ELEVATION
INFORMATION ONLY
As-Built
U.S. DEPARTMENT OF ENERGY
BUILDING 1B REPLACEMENT
FLOOR PLAN & ELEVATIONS
D 38475-102 B 3-4

BUILDING 113

LOADS

		WATTS
ELEC HEAT	1000 x 2	2000
DUPLEX RECPT	200 x 6	1200
LIGHTING	125 x 4	500
A/C		7000
SECURITY		1800
TOTAL	100%	12500
AMPS	12500 ÷ 220 =	56.82
LOAD without HEAT	8500 ÷ 220 =	38.65
MAIN BREAKER	2 POLE	70

PANEL

		1 Ø				
70	MAIN	1	A	2	ELEC	20
70	BREAKER	3	B	4	HEAT	20
20	LIGHTING	5	A	6	RECPTS	20
40	A/C	7	B	8	RECPTS	20
40	A/C	9	A	10	SECURITY	20
	UNUSED	11	B	12	UNUSED	

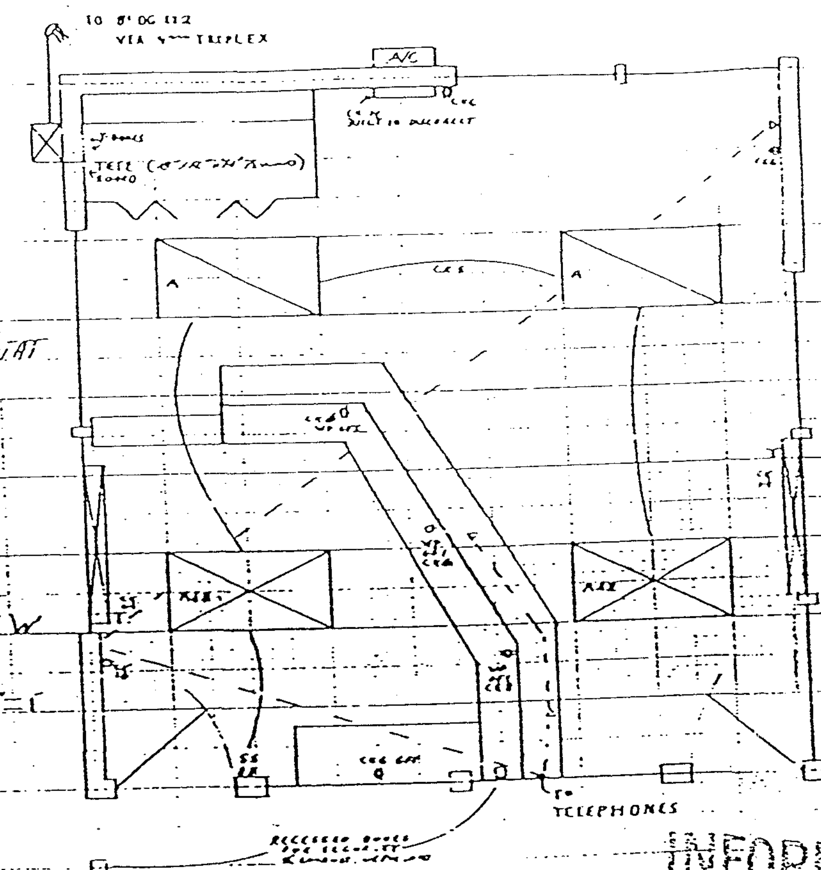
2'X 4' 2 TUBE FLOR

2'X 4' 4 TUBE FLOR DUAL LEVEL LIGHTING

ELEC HEAT T=THERMOSTAT

COUNTER RECPT GFI CUT-IN WITH WP PLATE UNDER COUNTER

SERVICE
100A BUSS 220 E 1Ø
PANEL TYPE-NQ... 43H
100,000 AIC
FEEDERS-4 #00 XHHW

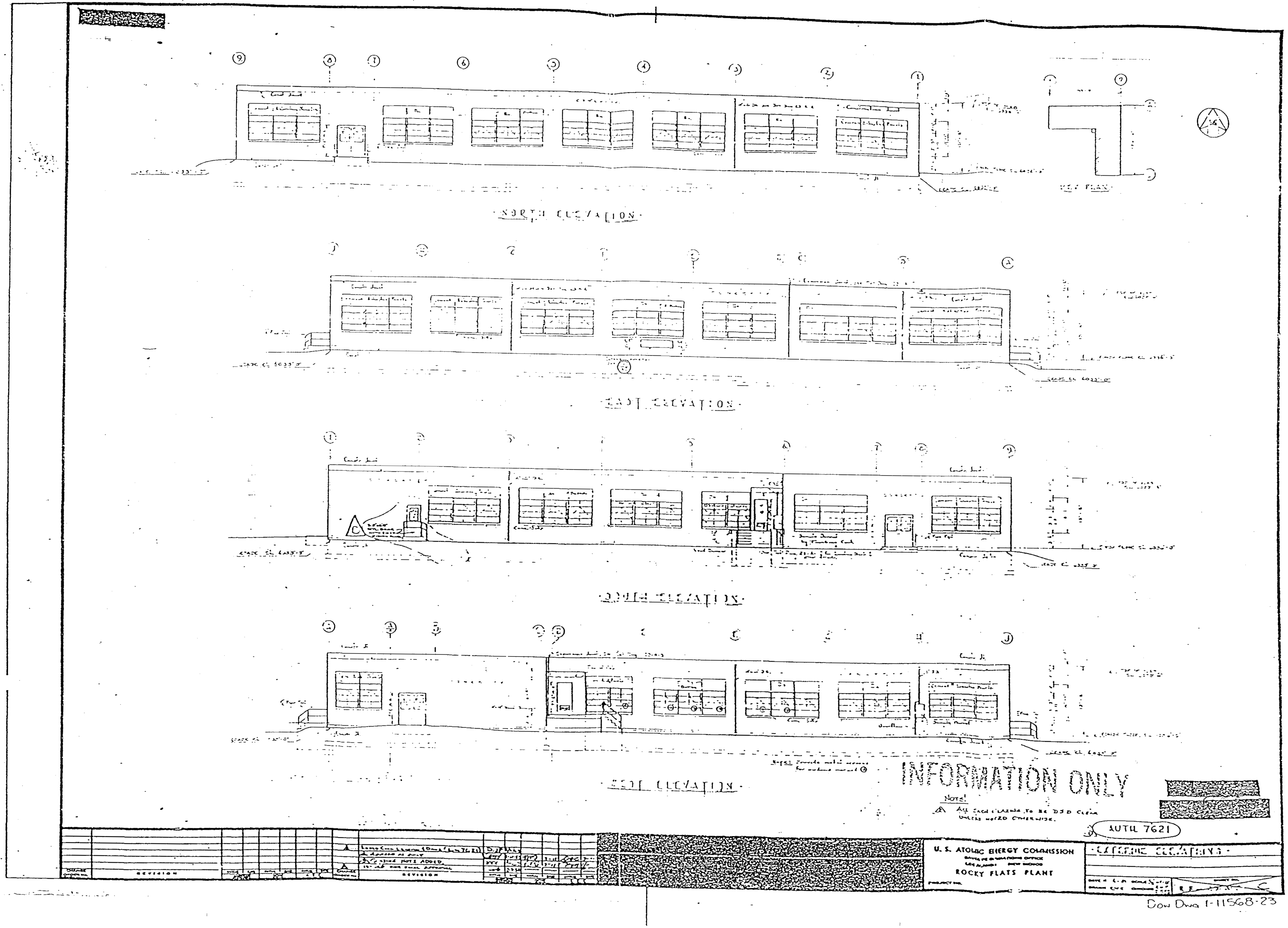


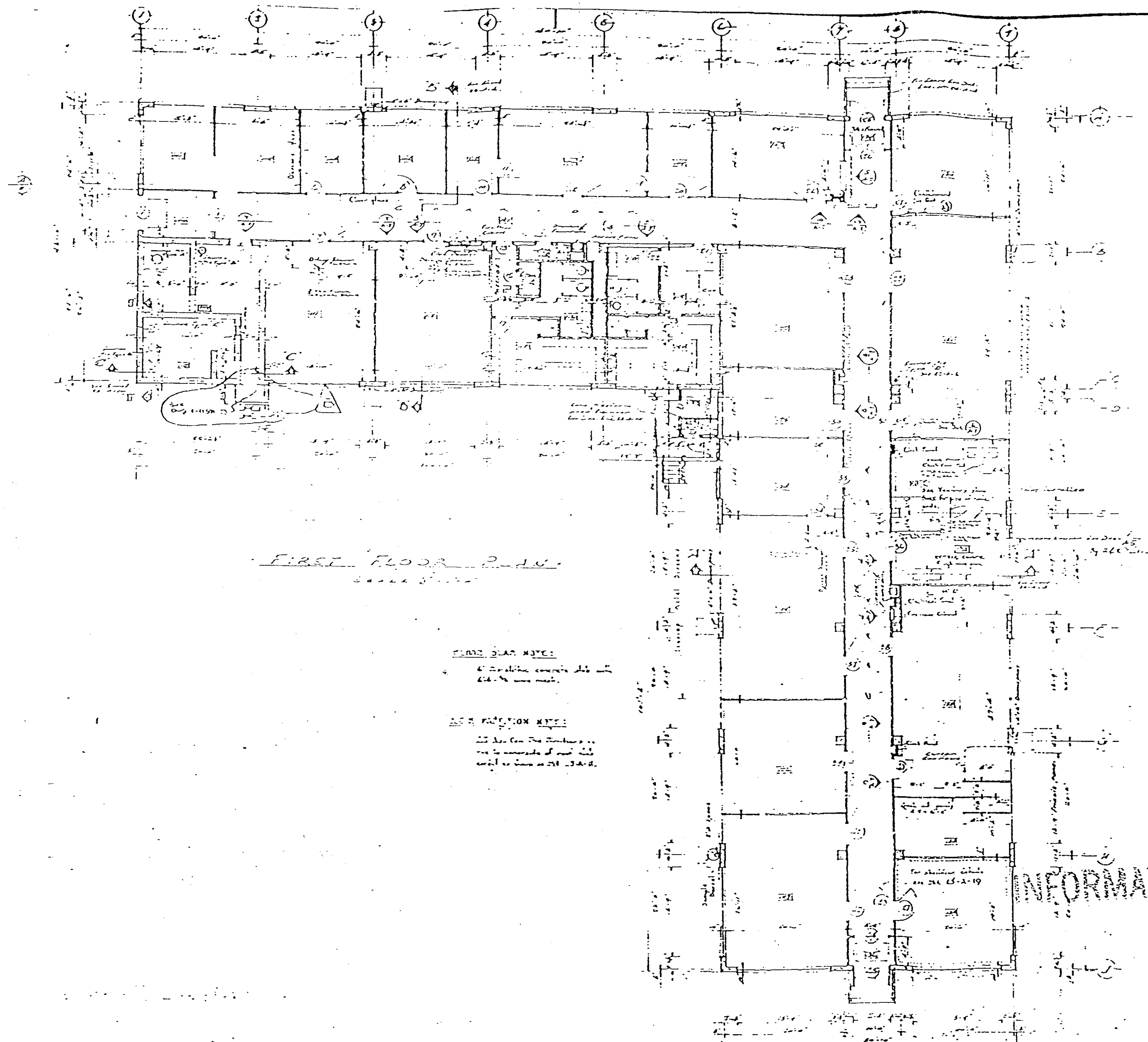
SCALE=1/2"=1'

INFORMATION ONLY

B	AS-BUILT
A	ORIGINAL ISSUE
KEYWORDS	
SCALE	1/2"=1'

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
BUILDING 113 REPLACEMENT
ELECTRIC DISTRIBUTION
D 38475-300 B 1 of 1


NORTH ELEVATION
KEY PLAN
EAST ELEVATION
SOUTH ELEVATION
WEST ELEVATION
INFORMATION ONLY
Note!
All each (?) to be D.S.D. clear unless noted otherwise.
AUTH. 7621
U. S. ATOMIC ENERGY COMMISSION
ROCKY FLATS PLANT
EXTERIOR ELEVATIONS
REVISION
Dow Dwg 1-11568-23



INFORMATION ONLY

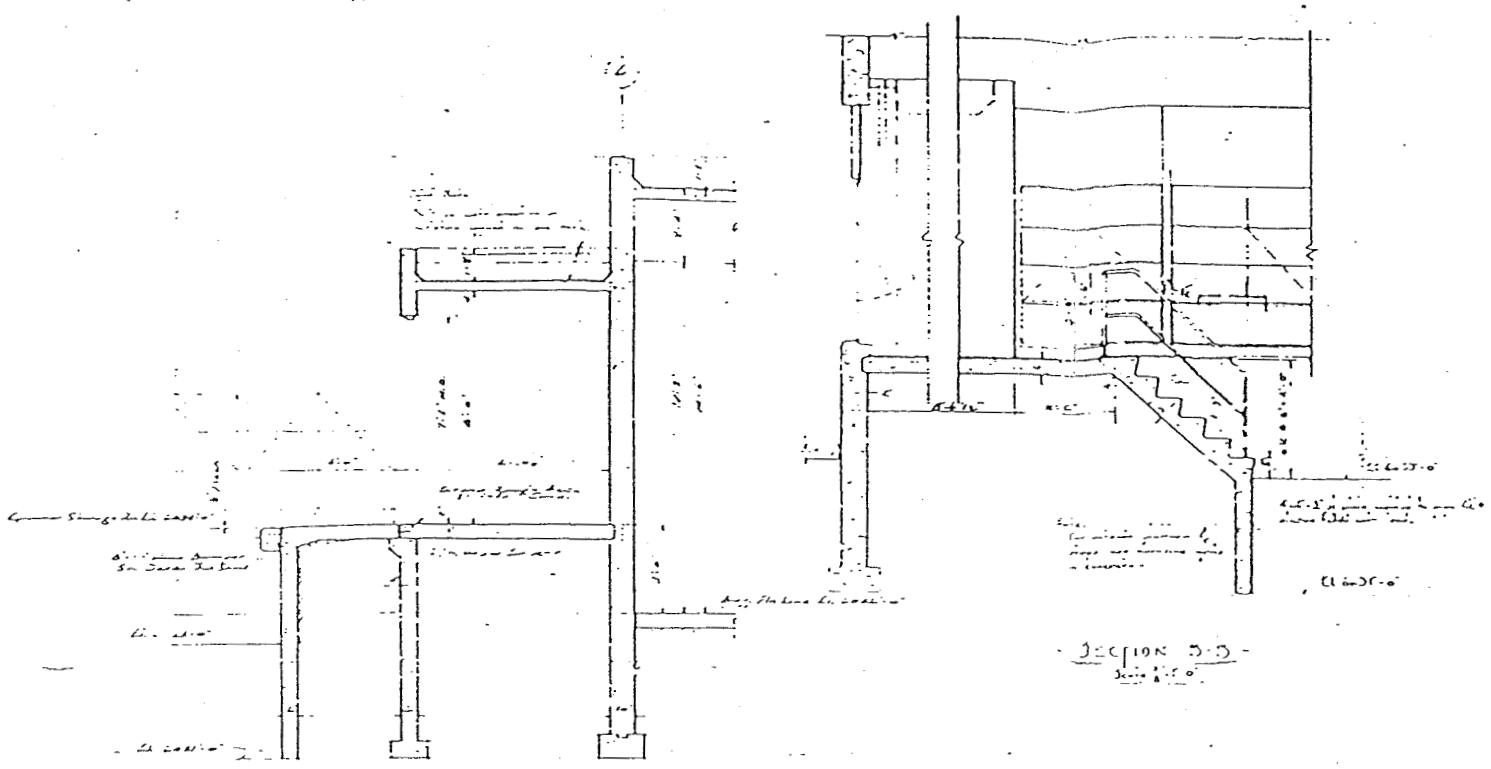
AUTH. 7621

[redacted]

U.S. ATOMIC ENERGY COMMISSION
ROCKY FLATS PLANT

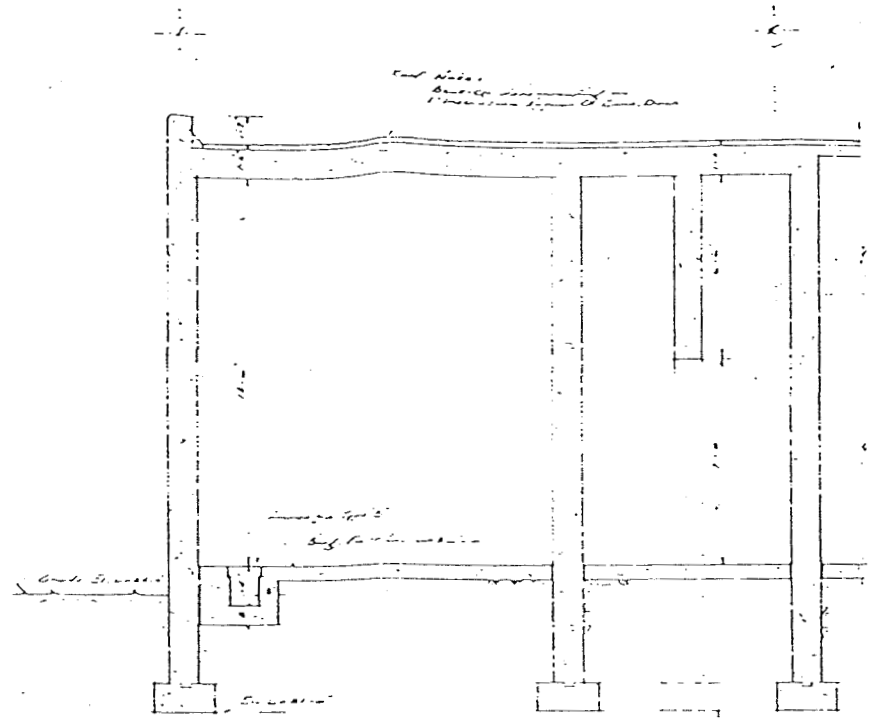
FIRST FLOOR PLAN

Dow Dwg. 1-11566-23

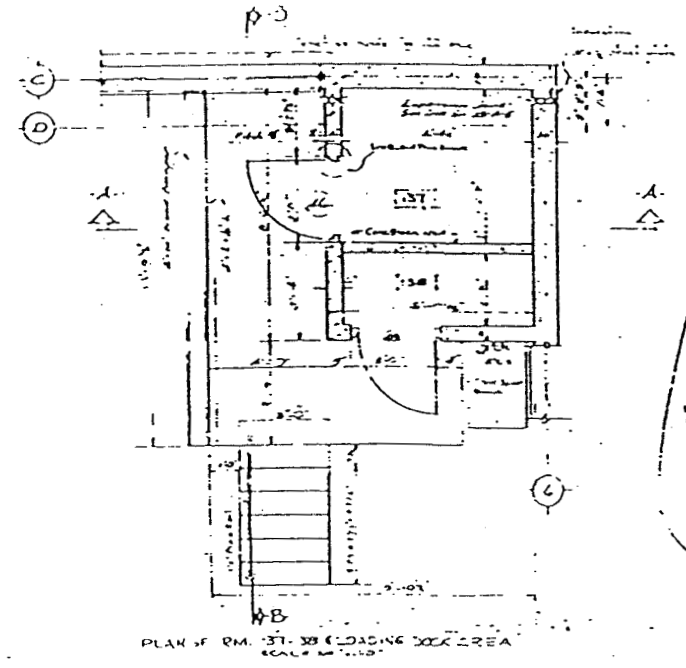


SECTION A-A

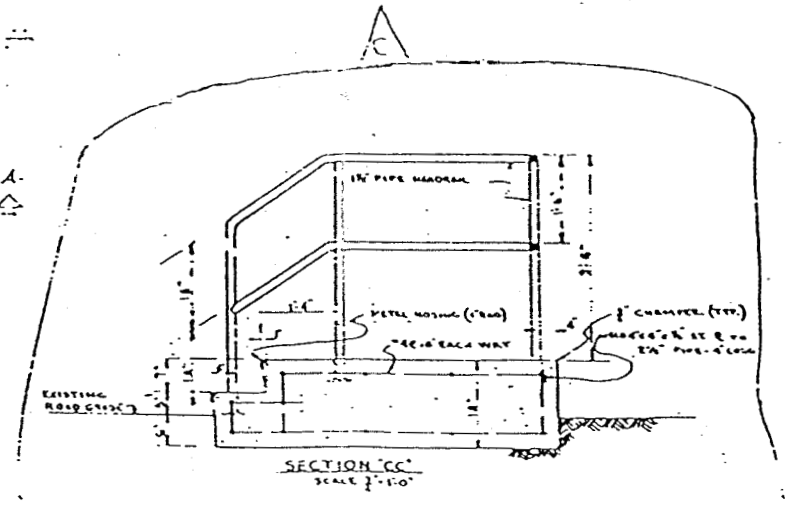
SECTION B-B



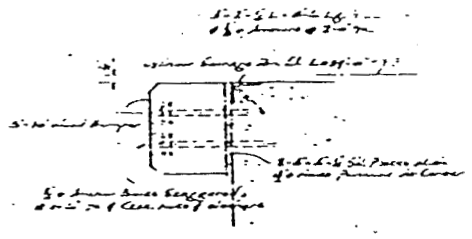
SECTION C-C THRU SOUTH SIDE OF CHAMBER



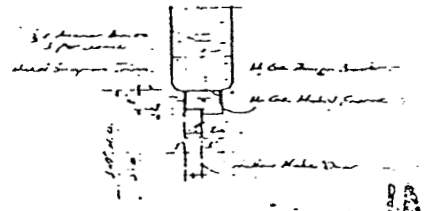
PLAN OF RM. 137 AT LOADING DOCK AREA



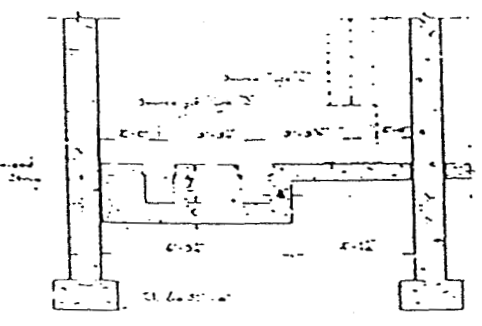
SECTION "CC"



BUMPER DETAIL



JAMB DETAIL DOOR No. 42



SECTION "D-D" THRU SOURCE CHAMBER

INFORMATION

DATE

AUTH. 7621

		U.S. ATOMIC ENERGY COMMISSION ROCKY FLATS PLANT	MISCELLANEOUS DETAILS

Dow Dwg. 1-11575-23

SLAB SCHEDULE

SLAB DETAIL

ZLAN

SECTION 3-B

ROOF FRAMING PLAN

TYPICAL ZEA
ZENING DIAGZAM

DETAIL X

TYPICAL WALL REINFZCAENT

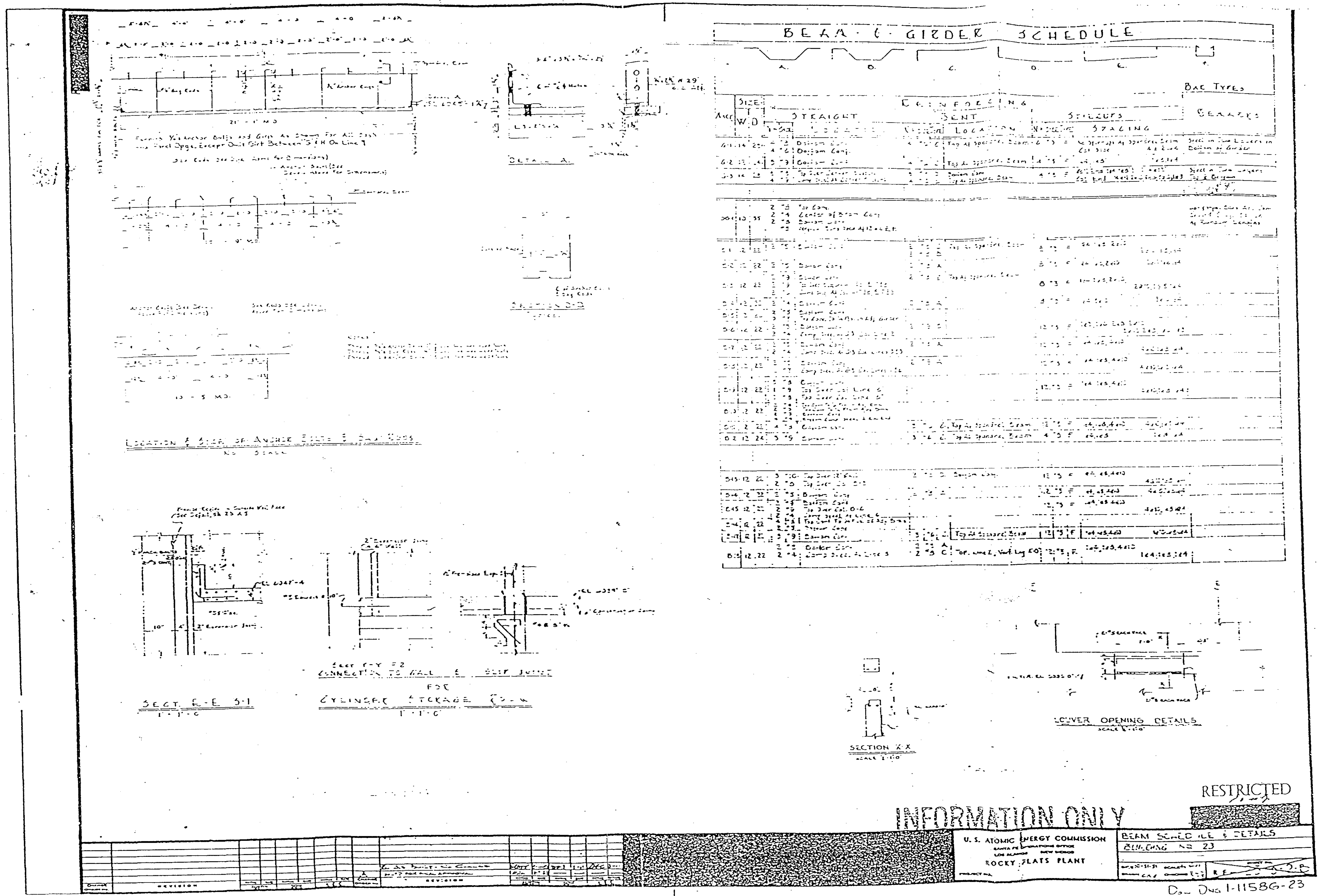
TYPICAL SPANDECL DCAM

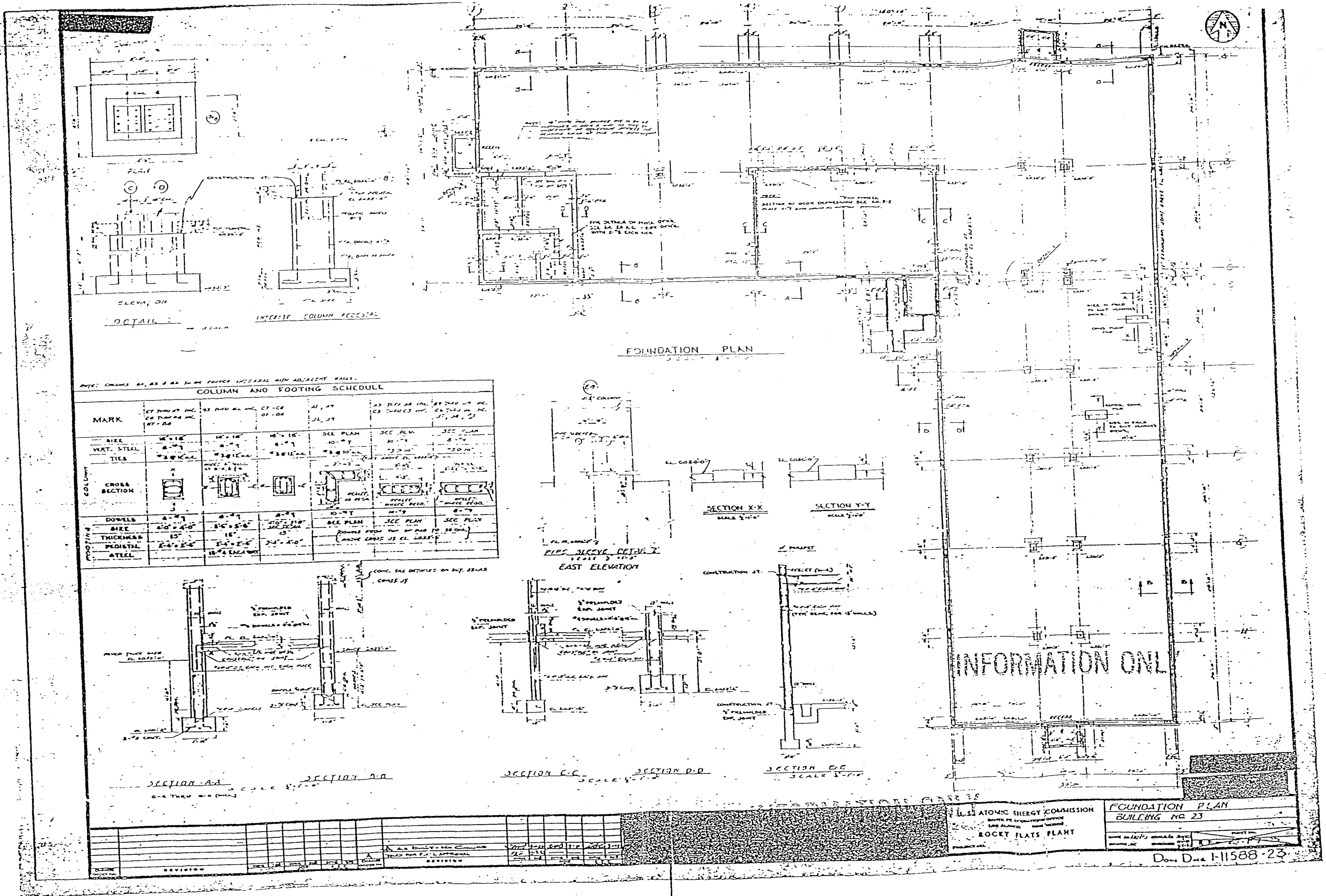
SCALE

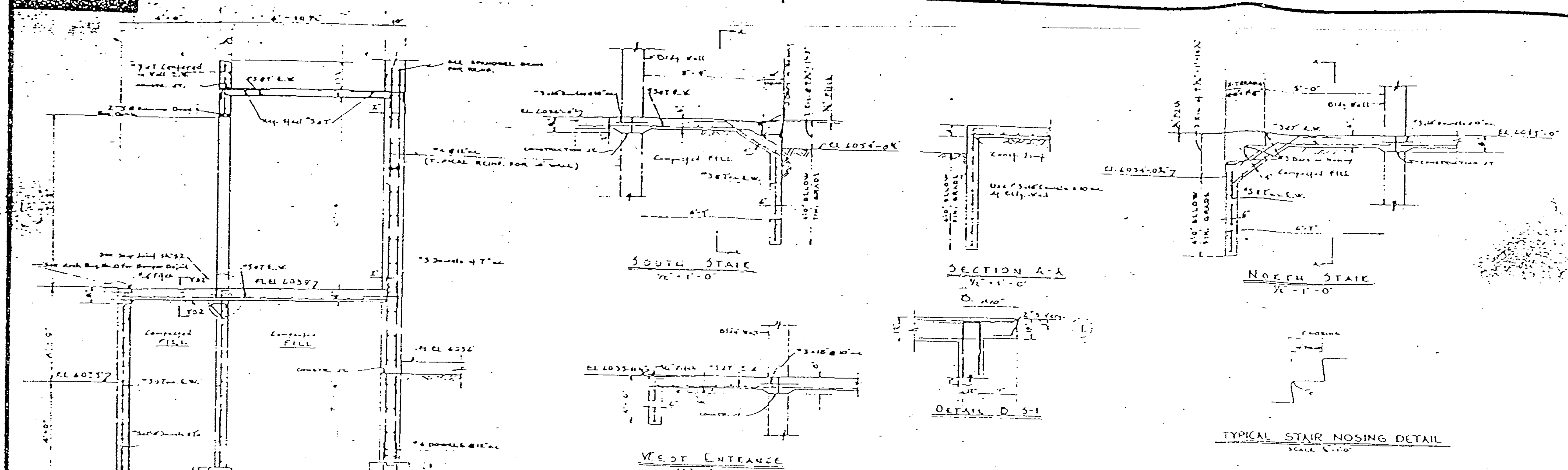
INFORMATION ONLY

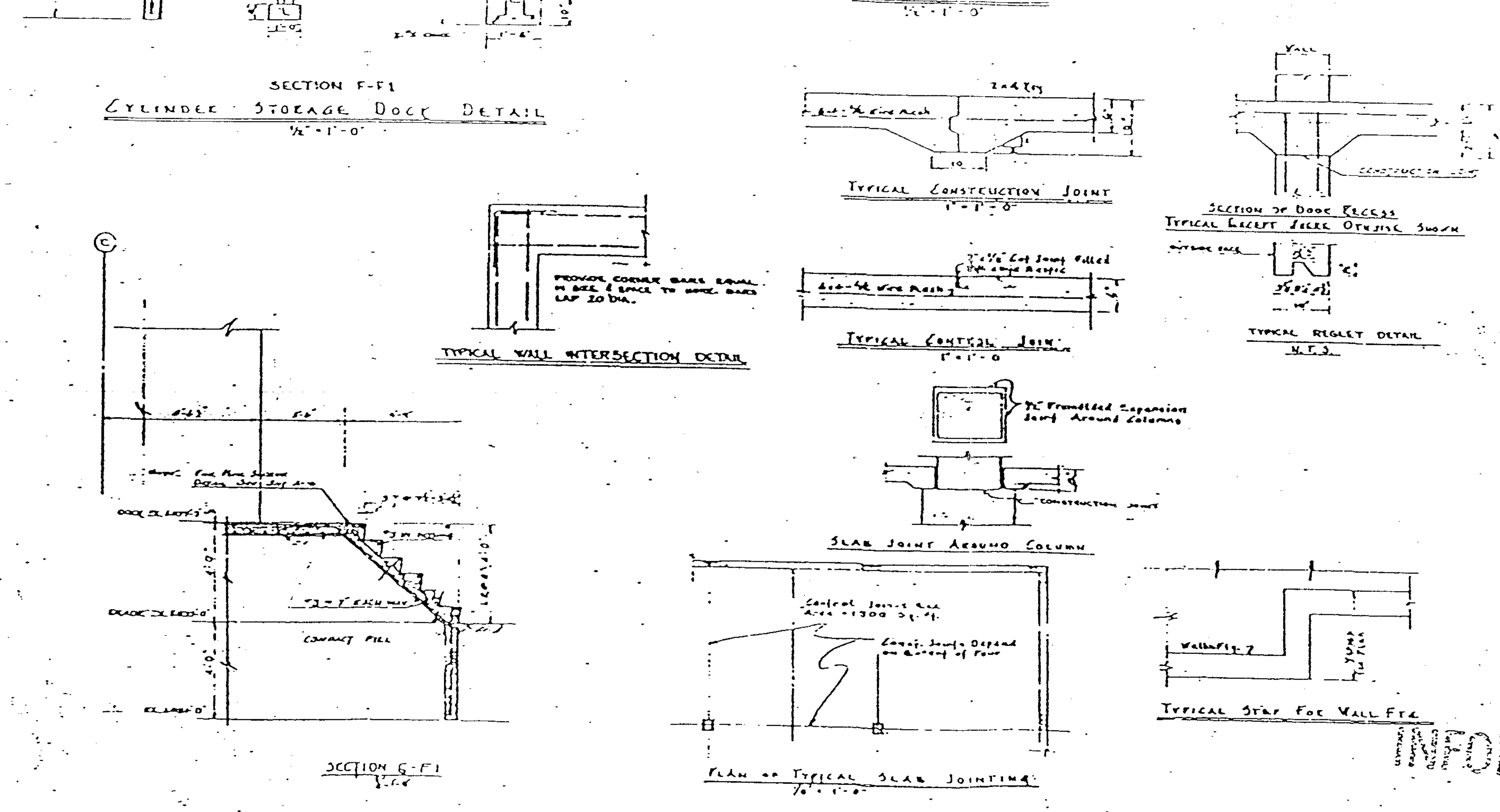
U. S. ATOMIC ENERGY COMMISSION
ROCKY FLATS PLANT

Dow Dwg 1-1155E5-23


BEAM & GIRDER SCHEDULE
BAR TYPES
SIZE
W.D
STRAIGHT
BENT
STIRRUPS
SPACING
LOCATION
BEARERS
DETAIL A
LOCATION & SIZE OF ANCHOR BOLTS & DOWELS
NO SCALE
SECT. E-E 5-1
1' = 1'-0"
CONNECTION TO WALL & SLIP JOINT
FOR
CYLINDER STORAGE
1' = 1'-0"
SECTION X-X
LOUVER OPENING DETAILS
REVISION
U. S. ATOMIC ENERGY COMMISSION
ROCKY FLATS PLANT
BEAM SCHEDULE & DETAILS
BUILDING No 23
RESTRICTED
INFORMATION ONLY
Dow Dwg 1-115 8G-23


FOUNDATION PLAN
COLUMN AND FOOTING SCHEDULE
MARK
SIZE
VERT. STEEL
TIES
CROSS SECTION
COLUMN
DOWELS
SIZE
THICKNESS
PEDESTAL
STEEL
FOOTING
DETAIL
ELEVATION
PLAN
INTERIOR COLUMN PEDESTAL
SECTION X-X
SECTION Y-Y
PIPE SLEEVE DETAIL
EAST ELEVATION
SECTION A-A
SECTION B-B
SECTION C-C
SECTION D-D
SECTION E-E
INFORMATION ONLY
U.S. ATOMIC ENERGY COMMISSION
ROCKY FLATS PLANT
FOUNDATION PLAN
BUILDING NO 23
REVISION
Dow Dwg 1-11588-23





GENERAL NOTES - REINFORCED CONCRETE

MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE UNIFORM BUILDING CODE, VOLUMES I AND II 1949

ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE STRENGTH OF 3000 PSI AT 28 DAYS.

REINFORCING STEEL SHALL BE DEFORMED, HIGH BOND, INTERMEDIATE GRADE, ROLLED FROM BILLET STEEL, UNIFORM BUILDING CODE STANDARD NO 26-4. [illegible] TO ASTM [illegible] A-305.

BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.

PROVIDE BAR SUPPORTS AND SPACERS TO SECURE ALL BARS IN PROPER LOCATION WHILE CONCRETE IS PLACED. WIRE ADEQUATELY AT ALL [illegible].

BAR SUPPORTS TO BE HOT DIPPED GALVANIZED WHERE PLACED AGAINST EXPOSED CONCRETE SURFACE

CONTINUOUS BARS SHALL LAP 30 DIAMETERS, WITH SPLICES STAGGERED. HORIZONTAL BARS SHALL HOOK 20 DIAMETERS AROUND CORNERS. WIRE MESH SHALL LAP 6" AT SIDES AND AT ENDS; WIRE ALL LAPS SECURELY. PROVIDE ADDITIONAL BARS AROUND ALL OPENINGS IN STRUCTURAL FLOORS AND WALLS EQUAL TO THE AREA OF THE BARS DISPLACED OR AS SHOWN IN THE DRAWINGS. WHERE WALLS JOIN COLUMNS CONTINUE HORIZONTAL WALL BARS THROUGH COLUMNS.

POUR SLABS ON FILL BETWEEN INDICATED CONSTRUCTION JOINTS CHECKERBOARD FASHION WITH MINIMUM INTERVAL OF 24 HOURS BETWEEN ADJACENT POURS.

USE CONSTRUCTION JOINTS WHERE INDICATED AND AS DETAILED, ALL OTHER CONSTRUCTION JOINTS WHERE NEEDED ARE SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER.

FOR LOCATION OF SLEEVES, INSERTS, ETC., SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL PLANS.

MINIMUM COVER FOR REINFORCING STEEL:

FOOTINGS	3"
WALLS BELOW GRADE	2"
BEAMS AND COLUMNS	1½"
WALLS ABOVE GRADE	1" INSIDE, 1½" OUTSIDE
SLABS	1" CLEAR, [illegible]

GENERAL NOTES - FOUNDATIONS

ALL FOOTINGS ARE TO BE CARRIED DOWN TO UNDISTURBED SOIL OF 6000 POUNDS PER SQUARE FOOT BEARING VALUE.

ALL FOOTINGS ARE TO BE CARRIED DOWN TO ELEVATIONS SHOWN ON THE PLANS WITH A MINIMUM OF 4'-0" BELOW FINISH GRADE FOR ALL EXTERIOR FOOTINGS.

BACKFILLS TO BE MADE ON INSIDE AND OUTSIDE OF WALLS SIMULTANEOUSLY.

EXCESS EXCAVATIONS BELOW BEARING OF FOOTINGS IS TO BE FILLED WITH FOUNDATION CONCRETE.

IF CONDITIONS FOUND AT THE SITE VARY FROM THOSE INDICATED ON THE PLAN, THE CONTRACTING OFFICER IS TO BE NOTIFIED SO THAT HE MAY ADJUST FOOTINGS TO SUIT SITE CONDITIONS.

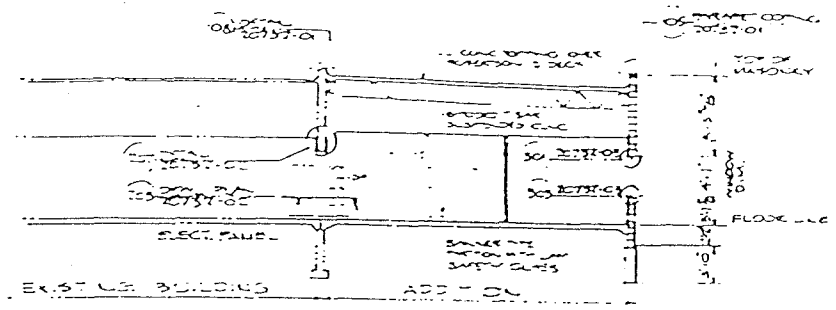
INFORMATION ONLY

REVISION	REVISION

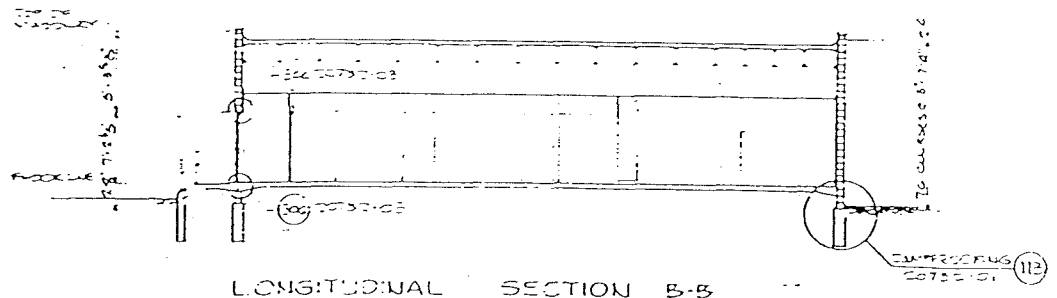
U. S. ATOMIC ENERGY COMMISSION
ROCKY FLATS PLANT

FOUNDATION DETAILS
BUILDING NO 23

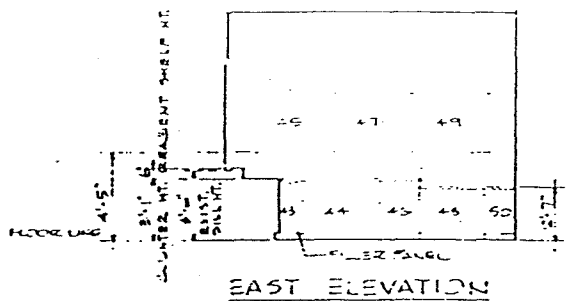
Dow Dwg 1-11589-23



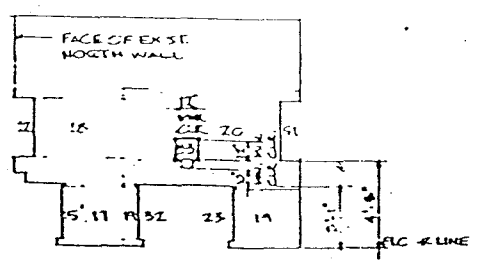
CROSS SECTION A-A
SCALE: 1/8" = 1'-0"



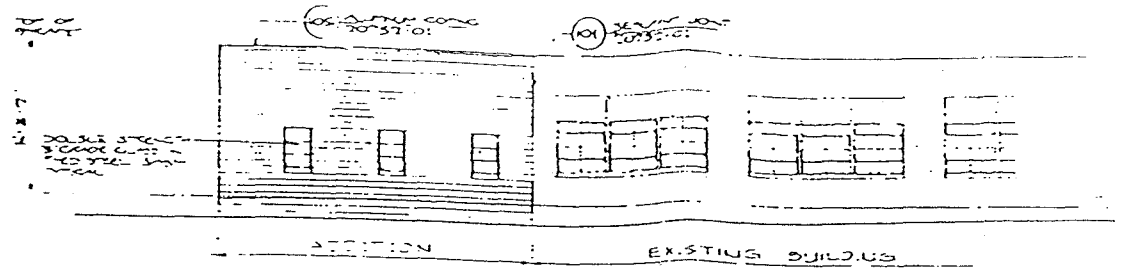
LONGITUDINAL SECTION B-B
SCALE: 1/8" = 1'-0"



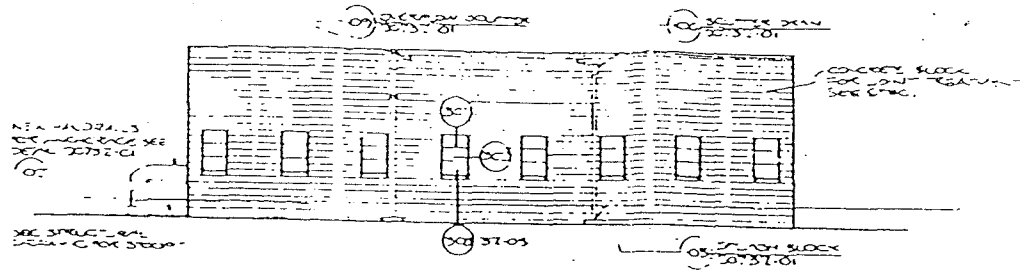
EAST ELEVATION
ROOM 104
SCALE: 1/4" = 1'-0"



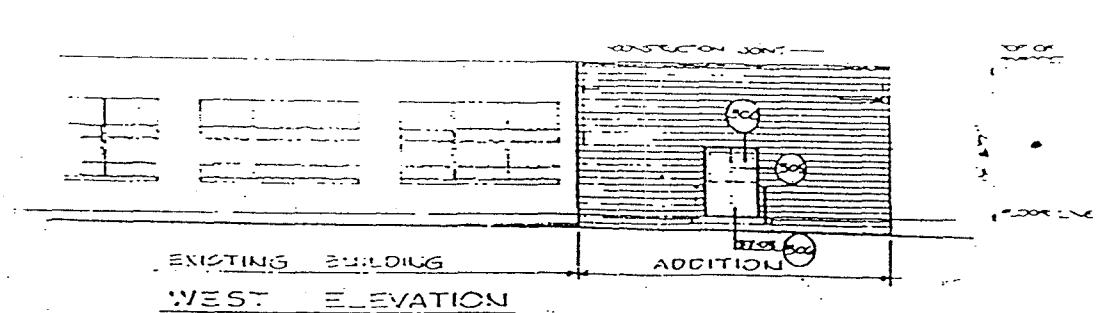
SECTION C-C
ROOM 103
SCALE: 1/4" = 1'-0"



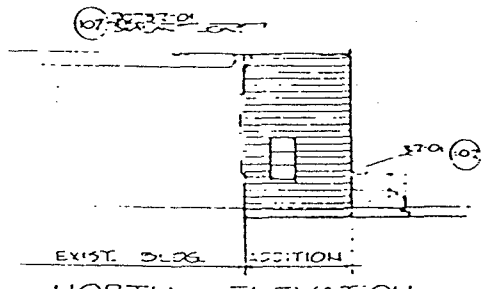
EAST ELEVATION
SCALE: 1/8" = 1'-0"



SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



WEST ELEVATION
SCALE: 1/8" = 1'-0"



NORTH ELEVATION
SCALE: 1/8" = 1'-0"

INFORMATION ONLY

A	AS SUILT				

U. S. ATOMIC ENERGY COMMISSION
ROCKY FLATS AREA OFFICE — GOLDEN, COLORADO
G. E. BRAUN & CO.
ALHAMBRA, CALIFORNIA

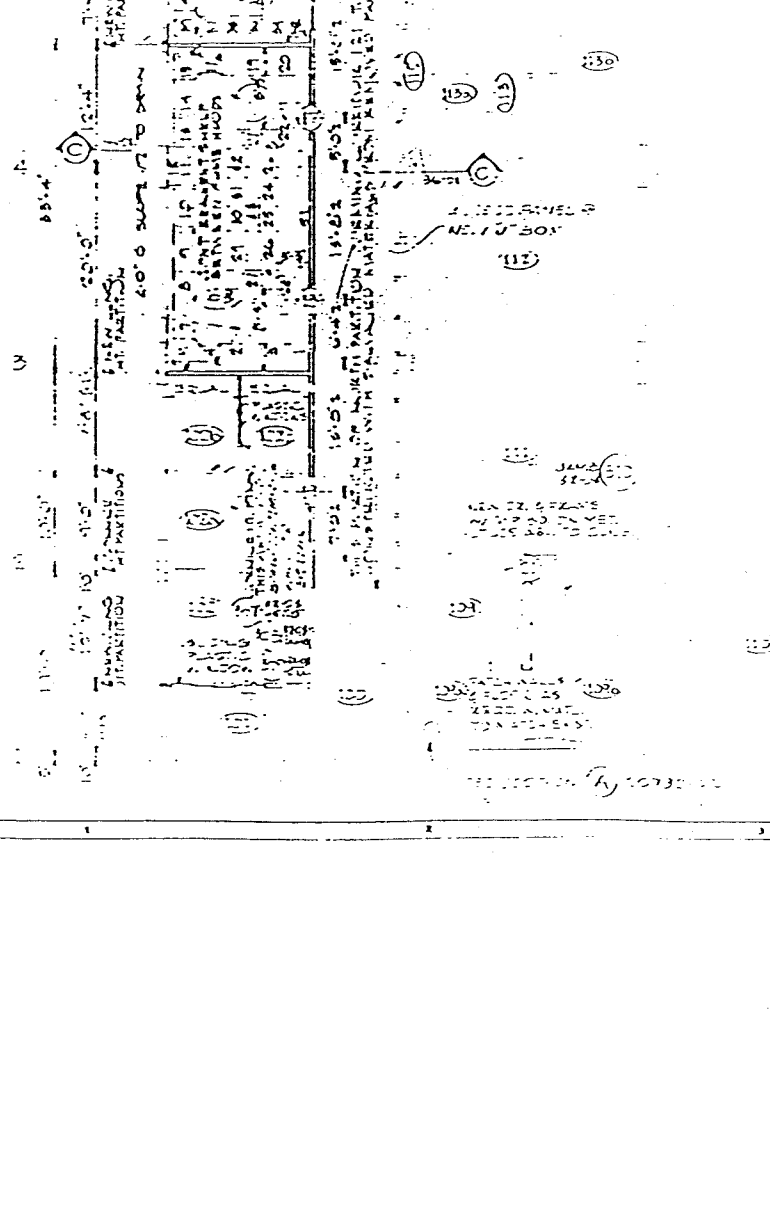
BLDG. 81 PART V EXPANSION AREA

SECTIONS & ELEVATIONS

D — 20736-01 — A

EXISTING BUILDING

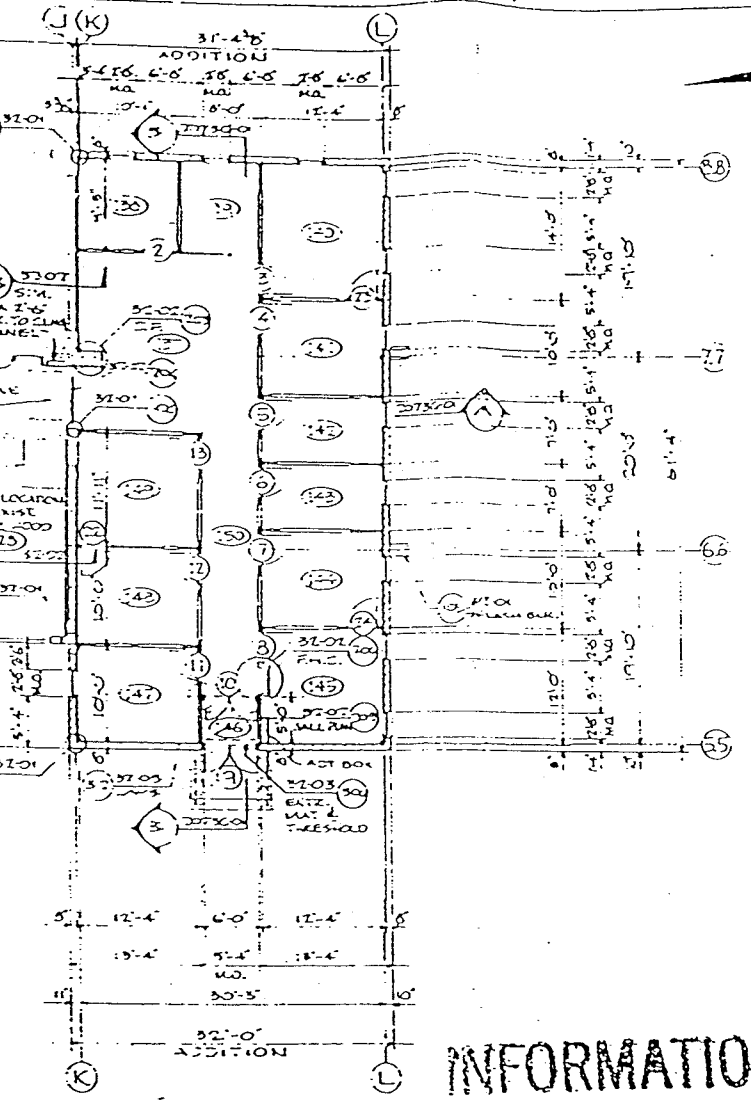
ADDITION



FLOOR PLAN
MODIFICATION

LIST OF EQUIPMENT ITEMS
LOCATED IN ROOMS 103 & 104

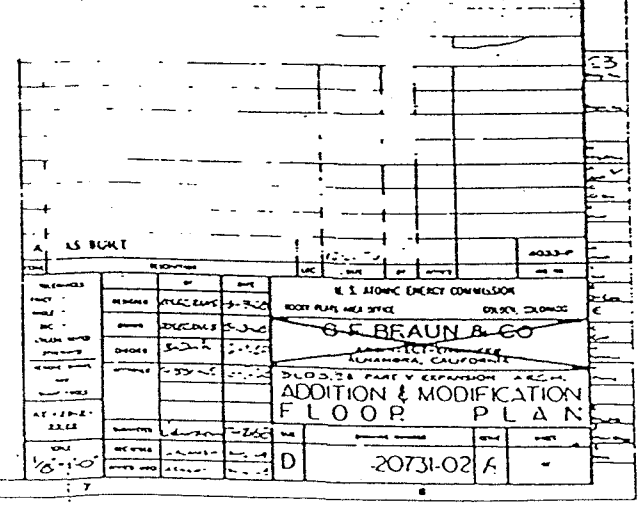
1 CUPBOARD UNIT
2 DRYING CABINET
3 LAB HOOD ABOVE ITEMS 1 & 2
4 DRAWER UNIT
5 SORTER UNIT
6 WALL CABINET ABOVE ITEMS 4 & 5
7 ACID STORAGE
8 DRAWER CUPBOARD
9 DRAWER UNIT
10 SINK W/DRAINBOARD
11 DRAWER UNIT
12 WALL CASE ABOVE ITEMS 10 & 11
13 DRAWER UNIT
14 ACID STORAGE
15 CORNER UNIT
16 WALL CABINET ABOVE ITEMS 14 & 15
17 GLASS STORAGE
18 WALL CABINET ABOVE ITEMS 16 & 17
19 CUPBOARD UNITS
20 VISHCAN HOOD ABOVE ITEM 19
21 LAB SINK UNIT
22 BACKBOARD ELEC ITEM 21
23 CUPBOARD UNIT
24 CUPBOARD UNIT
25 APRON
26 DRAWER UNIT
27 BACK SHELF UNIT
28 BACKBOARD ELEC ITEM 27
29 DOUBLE WORKSCOPE SECTIONAL
30 APRON
31 DRAWER UNIT
32 DRAWER UNIT
33 REAGENT SHELF & FIXTURE APRON
34 DOUBLE DRAINBOARD SINK UNIT
35 BACKBOARD ELEC ITEM 34
36 DRYING CABINET
37 BASE CABINET
38 LAB HOOD ABOVE ITEMS 36 & 37
39 CORNER UNIT
40 DRAWER UNIT
41 DRAWER UNIT
42 DRAWER UNIT
43 CORNER UNIT
44 DOUBLE SCOPE UNIT
45 WALL CABINET ABOVE ITEMS 43 & 44
46 WORKSCOPE UNIT
47 WALL CABINET ABOVE ITEMS 44 & 46
48 APRON
49 WALL CASE ABOVE ITEM 45
50 DRAWER FILE
51 3 WALL CABINETS



FLOOR PLAN
ADDITION

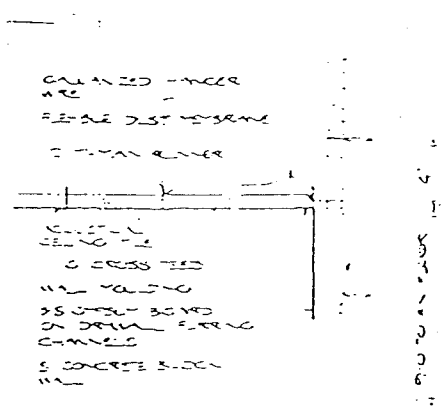
NOTES:
1 THE EQUIPMENT ITEMS LISTED ARE TO BE SUPPLIED BY THE CONTRACTOR

INFORMATION ONLY

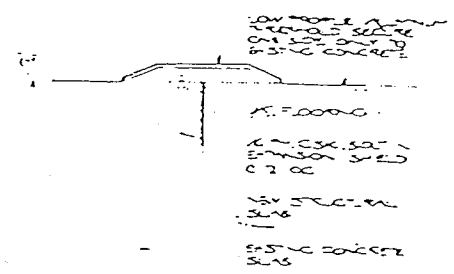


U.S. ATOMIC ENERGY COMMISSION
ROCKY FLATS AREA OFFICE GOLDEN, COLORADO
G. E. BRAUN & CO.
ALAMEDA, CALIFORNIA
BLDG. 28 PART V EXPANSION AREA
ADDITION & MODIFICATION
FLOOR PLAN
1/8"=1'-0" D 20731-02 A

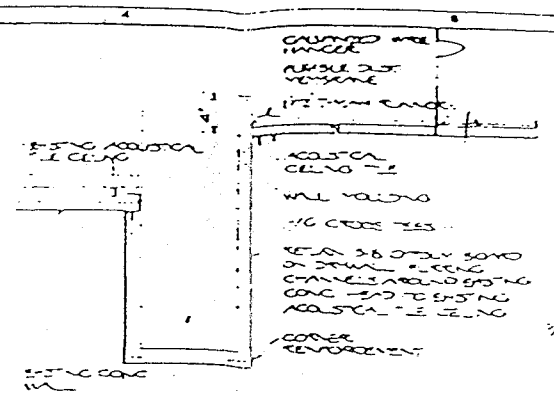
52



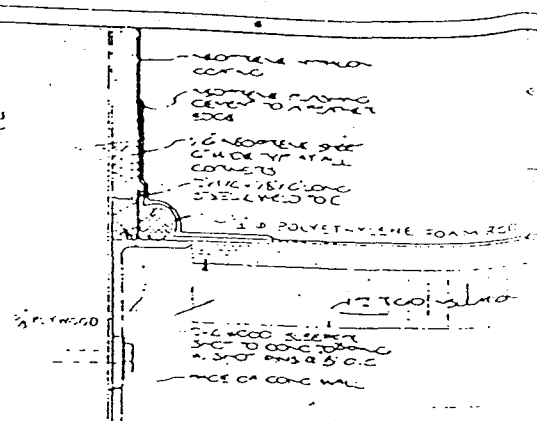
(10) CEILING & CONC. BLOCK WALL
SCALE 3/4"=1'-0"



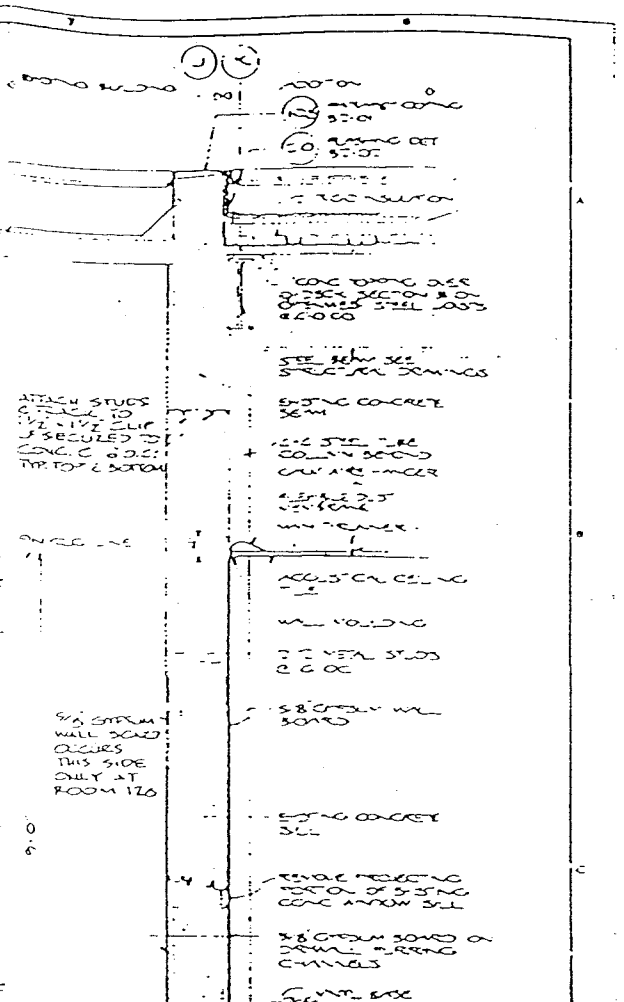
(11) WALL TO CEILING
SCALE 3"=1'-0"



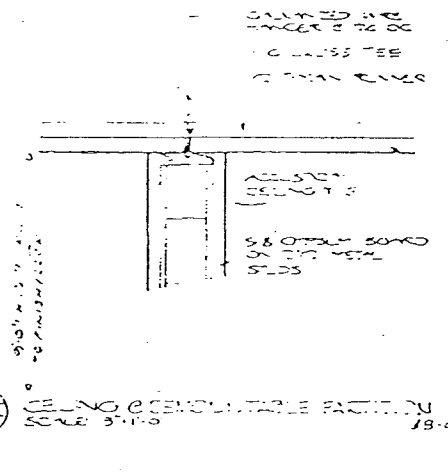
(12) CEILING & EXTG CONC WALL
SCALE 1/2"=1'-0"



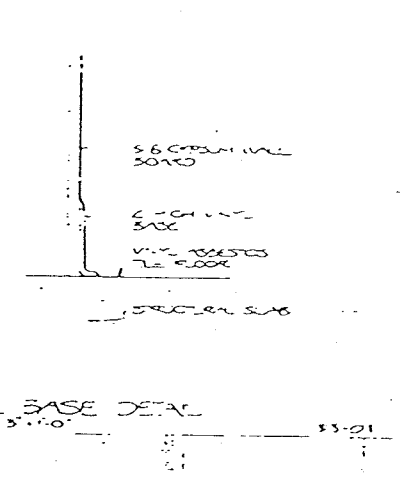
(13) FLASHING DETAIL TYPICAL
SCALE 3"=1'-0"



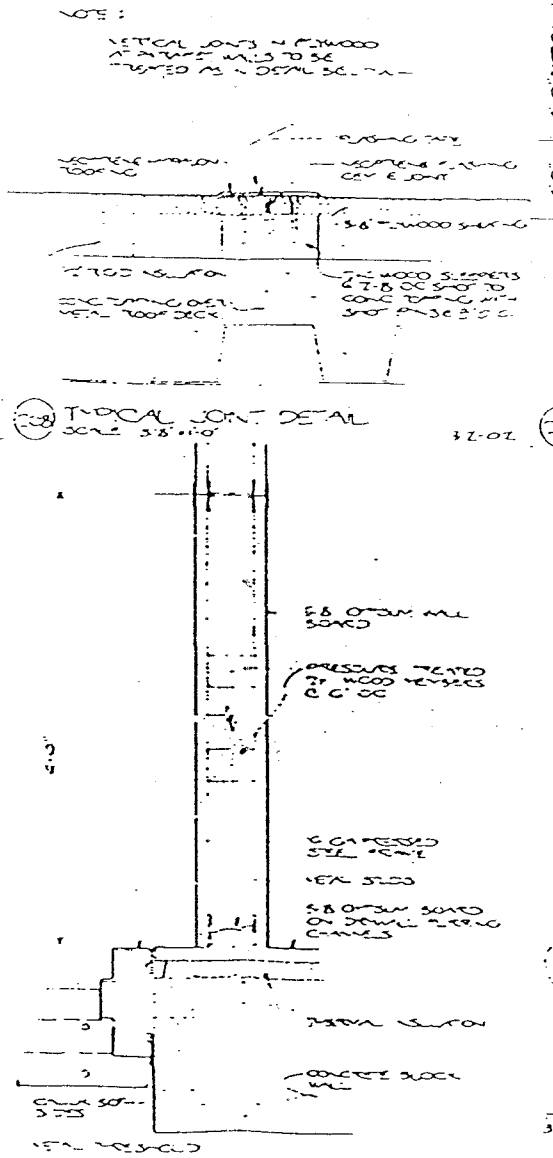
(14) WALL SECTION @ COL LINE J & K
SCALE 3/8"=1'-0"



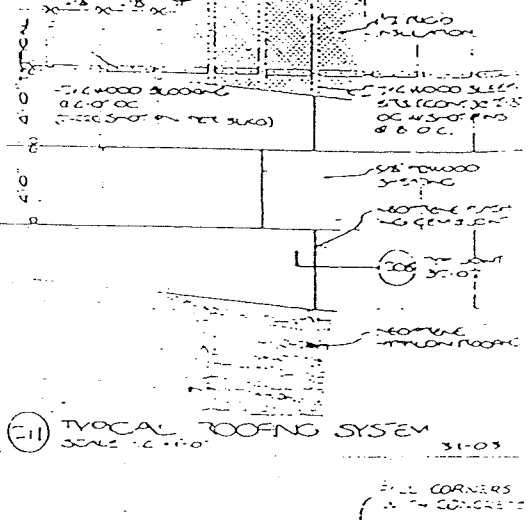
(15) CEILING & CEILING TILE FACING
SCALE 3/4"=1'-0"



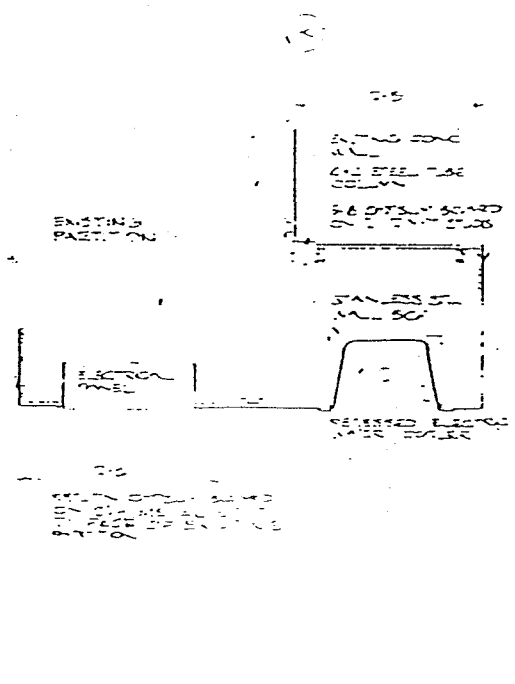
(16) WALL BASE DETAIL
SCALE 3"=1'-0"



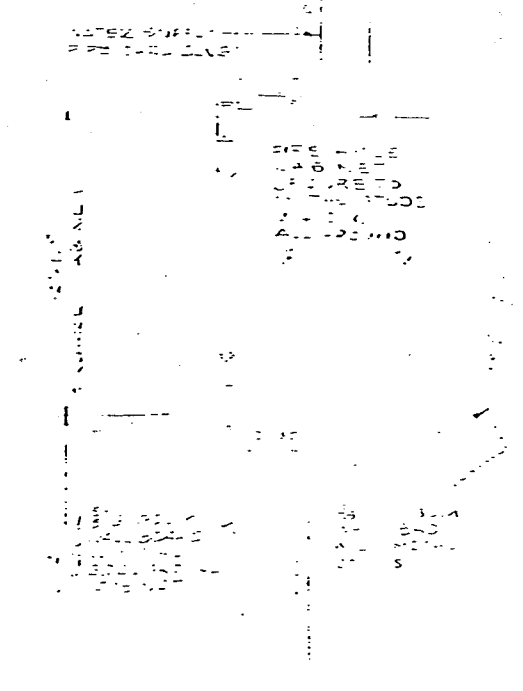
(17) TYPICAL JOINT DETAIL
SCALE 3"=1'-0"



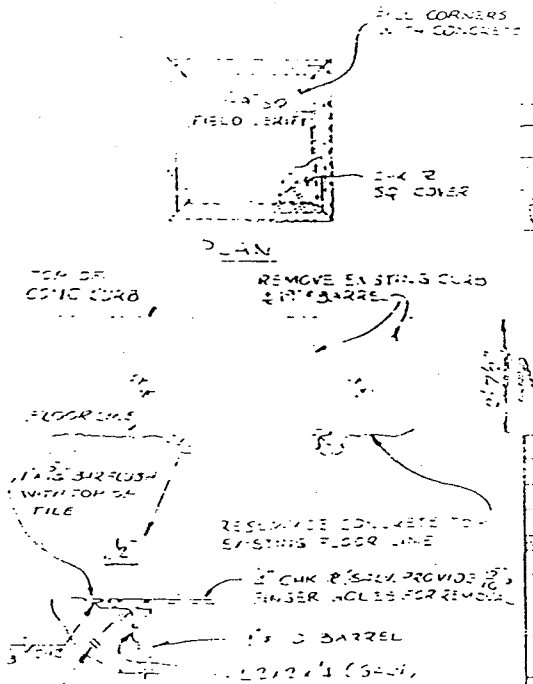
(18) TYPICAL ROOFING SYSTEM
SCALE 1"=1'-0"



(19) DRINKING FOUNTAIN DETAIL PLAN & FILE INSERT CABINET DETAIL
SCALE 1"=1'-0"



(20) PLAN OF SOUTH WALL AT 120
SCALE 3"=1'-0"



(A) SECTION
SCALE 3"=1'-0"

INFORMATION ONLY

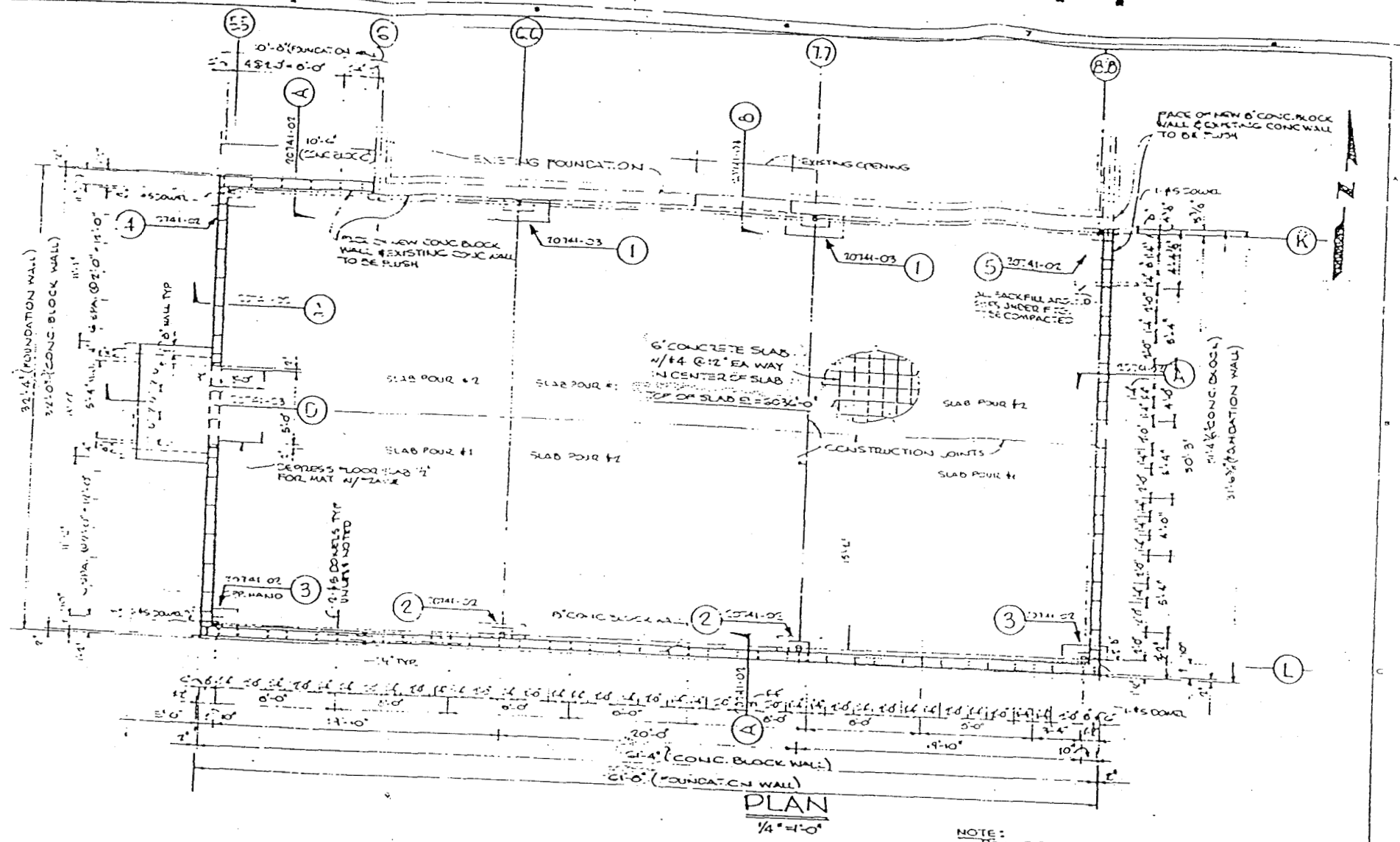
U.S. ATOMIC ENERGY COMMISSION
ROCKY FLATS AREA OFFICE
GOLDEN, COLORADO

C.F. BRAUN & CO.
ALHAMBRA, CALIFORNIA

BUILDING PART V EXPANSION PROJ.

INTERIOR DETAILS

D 20732-02

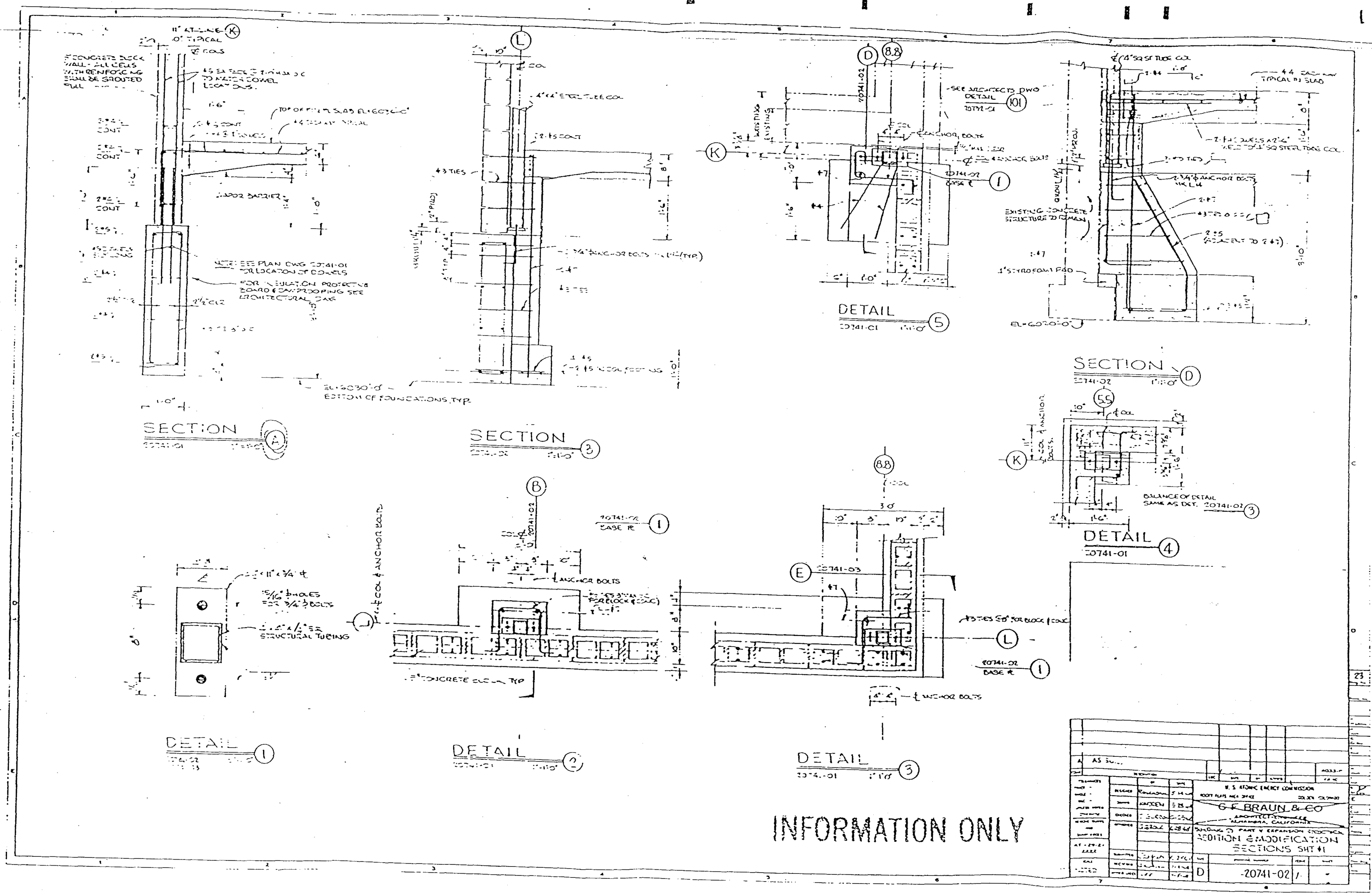


NOTE:
DO NOT PLACE CONCRETE FLOOR SLAB INTO UNDERGROUND UTILITIES

INFORMATION ONLY

A AS BUILT

U. S. ATOMIC ENERGY COMMISSION
ROCKY FLATS AREA OFFICE
GOLDEN, COLORADO
G. F. BRAUN & CO.
ALHAMBRA, CALIFORNIA
ADDITION & MODIFICATION
SLAB & FOUNDATION PLAN
D 20741-01


SECTION A
SECTION 3
DETAIL 5
SECTION D
DETAIL 4
DETAIL 1
DETAIL 2
DETAIL 3
NOTE: SEE PLAN DWG 20741-01 FOR LOCATION OF DOWELS
FOR INSULATION PROTECTIVE BOARD & DAMPPROOFING SEE ARCHITECTURAL DWGS
VAPOR BARRIER
EXISTING CONCRETE STRUCTURE TO REMAIN
1" STYROFOAM PAD
BALANCE OF DETAIL SAME AS DET. 20741-02 3
STRUCTURAL TUBING
ANCHOR BOLTS
INFORMATION ONLY
U. S. ATOMIC ENERGY COMMISSION
G. F. BRAUN & CO
ADDITION & MODIFICATION SECTIONS SHT #1
D
20741-02

DETAIL
20741-03

SECTION
20741-03 (E)

SECTION
20741-03 (F)

DETAIL
20741-03 HALF (3)

SECTION
20741-03 (1)

SECTION
20741-03 (2)

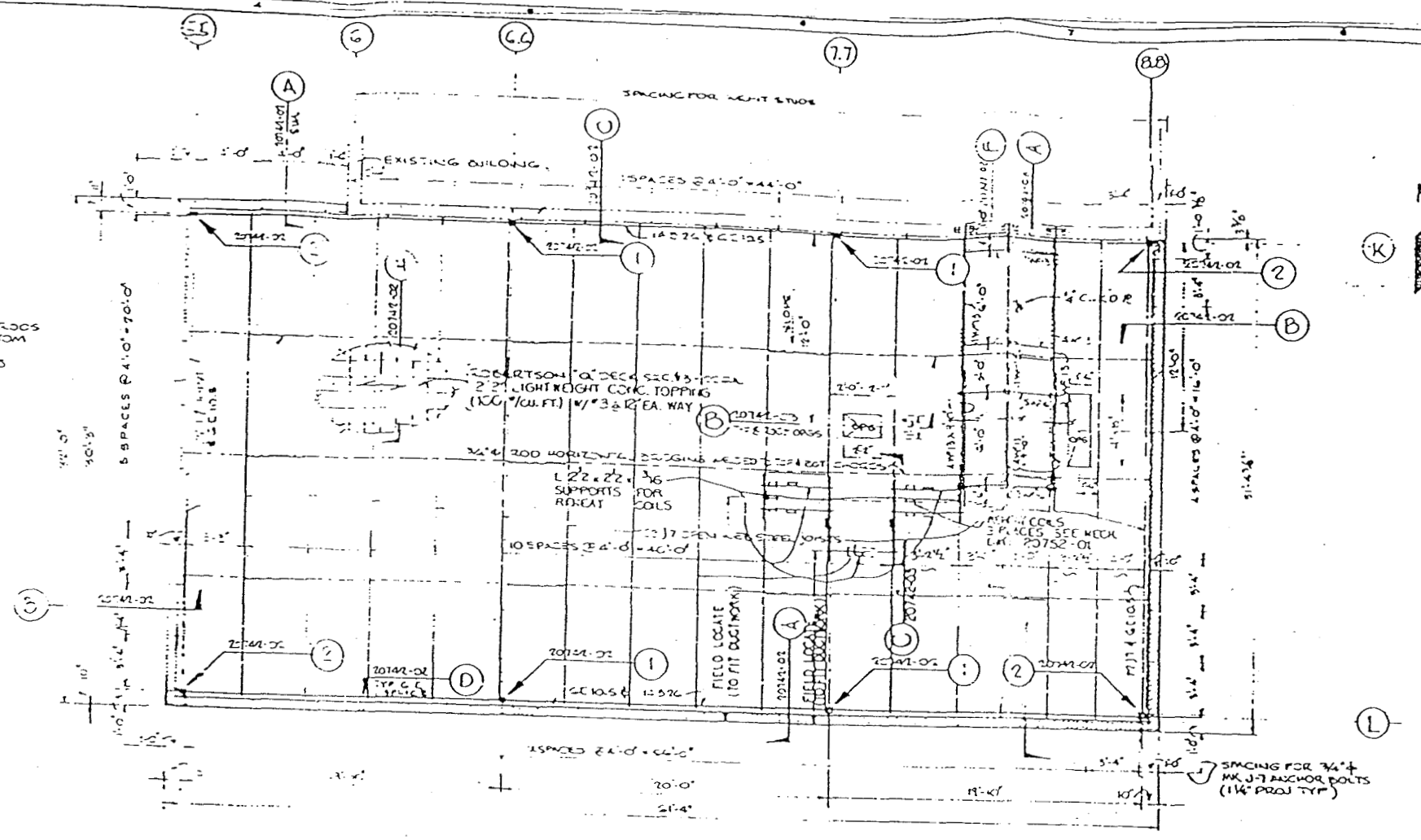
SECTION
20741-03 (4)

DETAIL
20741-03 (5)

SECTION
20741-03 (6)

INFORMATION ONLY

U.S. ATOMIC ENERGY COMMISSION
SAN ONOFRE NUCLEAR GENERATING STATION
G.F. BRAUN & CO.
ALHAMBRA, CALIFORNIA
UNIT NO. 1 MODIFICATION
SECTIONS SHT. #2
D 20741-03

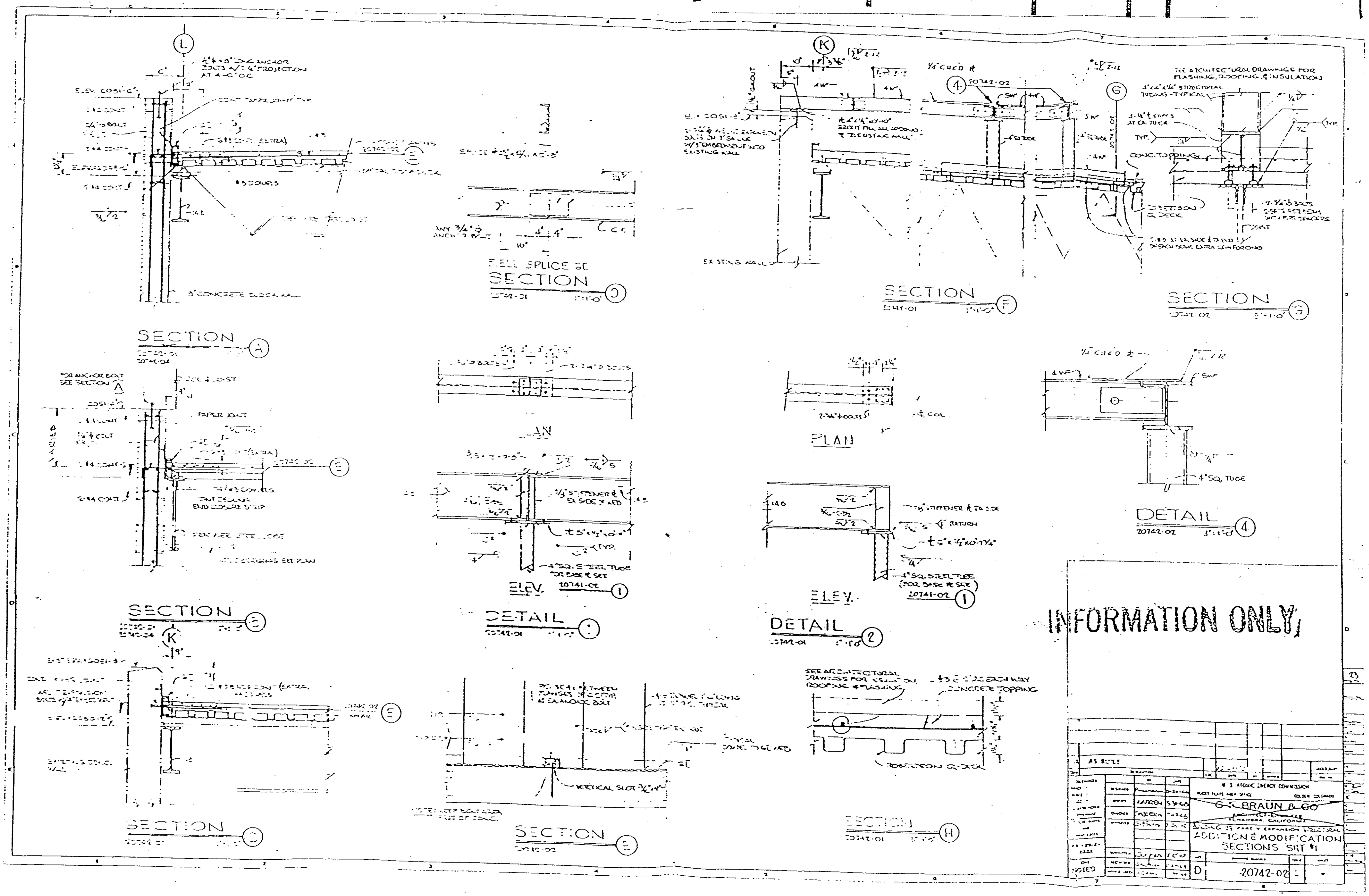


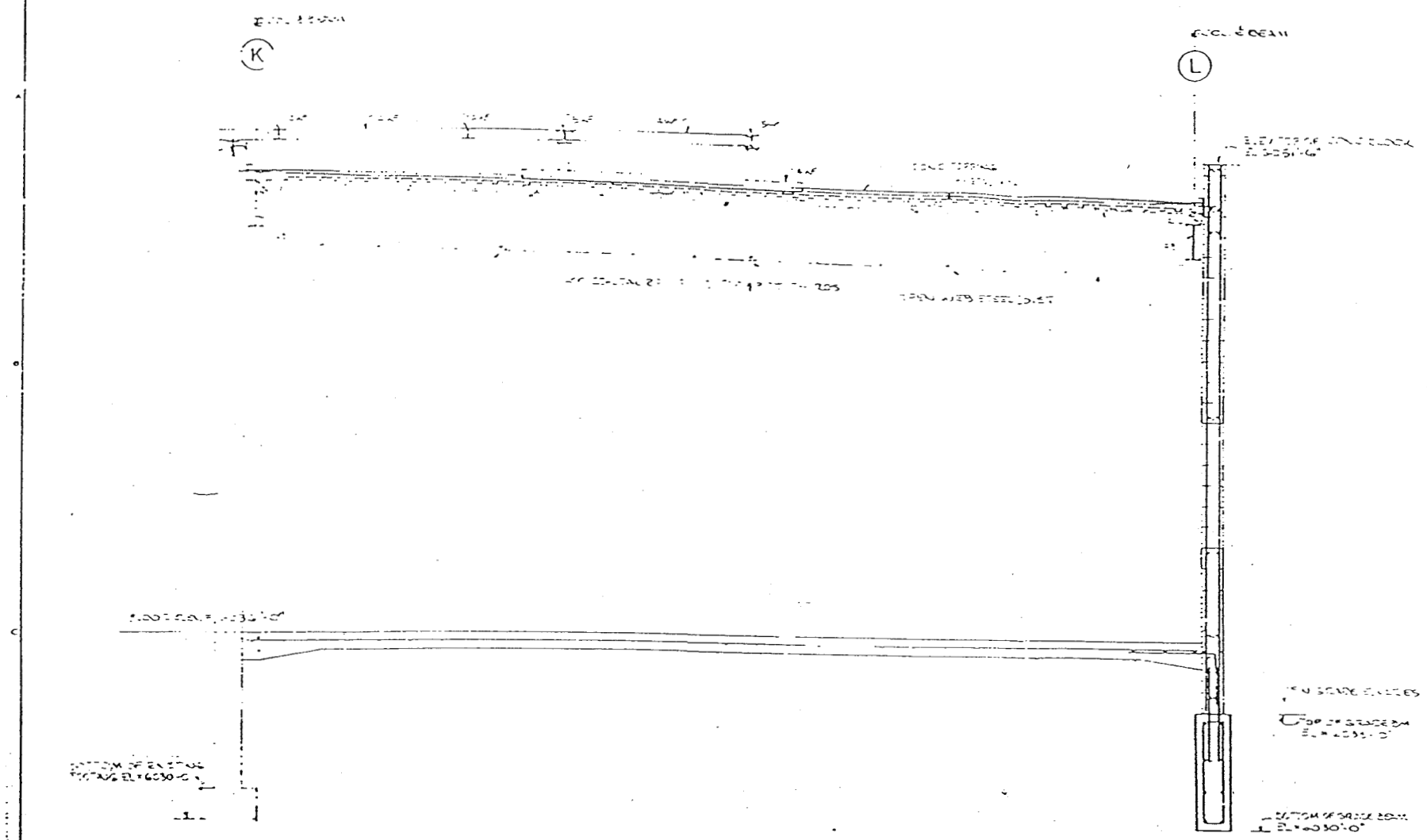
ROOF FRAMING PLAN

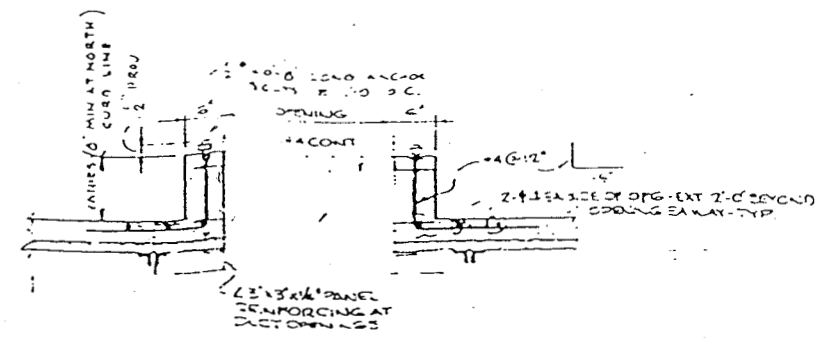
1/4"=1'-0"

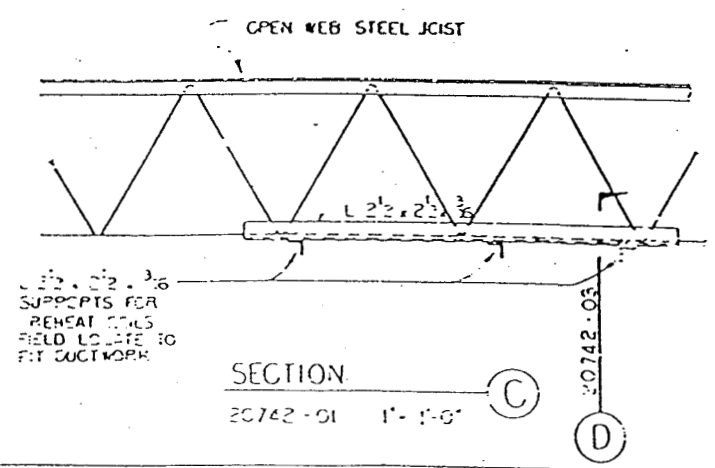
INFORMATION ONLY

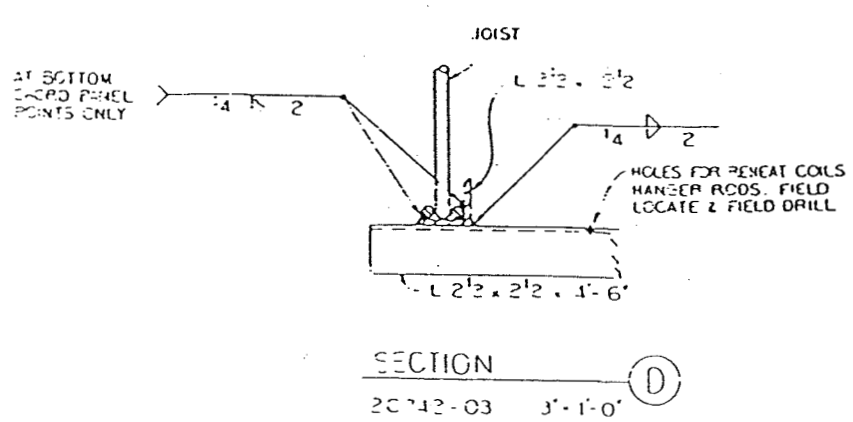
U.S. ATOMIC ENERGY COMMISSION
IDAHO FALLS, IDAHO OPERATIONS OFFICE
G.E. BRAUN & CO.
ENGINEERS
ALBUQUERQUE, NEW MEXICO
ADDITION & MODIFICATION
ROOF FRAMING PLAN
D 20742-01 G


SECTION A
SECTION B
SECTION C
FIELD SPLICE OF
SECTION D
SECTION E
SECTION F
SECTION G
SECTION H
PLAN
ELEV.
DETAIL 1
DETAIL 2
DETAIL 4
8" CONCRETE BLOCK WALL
#3 DOWELS
PAPER JOINT
EXISTING WALL
SEE ARCHITECTURAL DRAWINGS FOR FLASHING, ROOFING & INSULATION
CONC. TOPPING
4"SQ. TUBE
4"SQ. STEEL TUBE (FOR BASE PL SEE) 20741-02
VERTICAL SLOT
SEE ARCHITECTURAL DRAWINGS FOR ROOFING & FLASHING
CONCRETE TOPPING
ROBERTSON Q-DECK
INFORMATION ONLY
AS BUILT
U S ATOMIC ENERGY COMMISSION
G C BRAUN & CO
ALHAMBRA, CALIFORNIA
ADDITION & MODIFICATION
SECTIONS SHT #1
D
20742-02





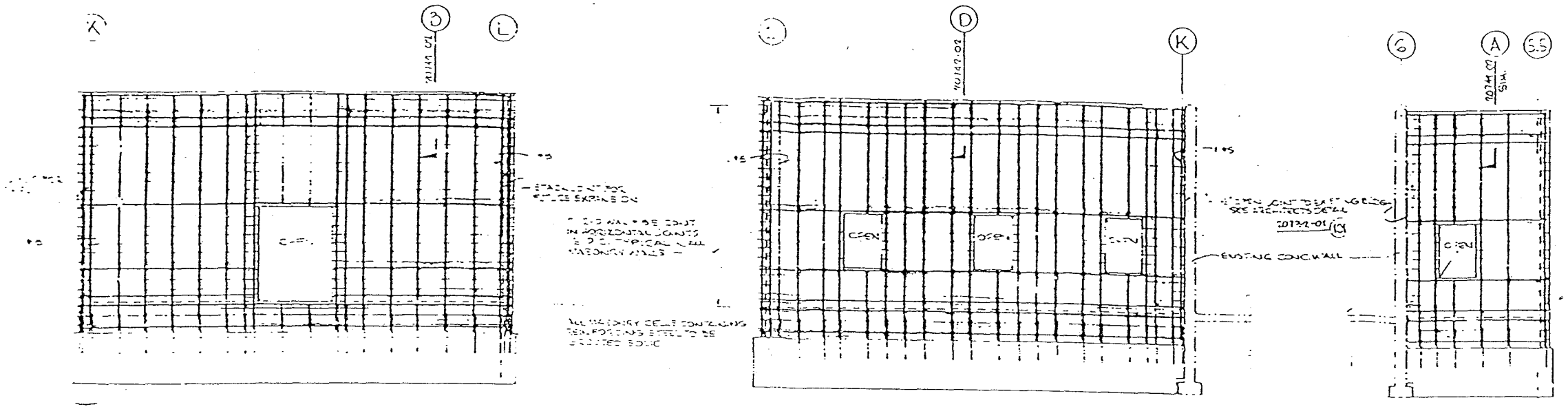




INFORMATION ONLY

23

U.S. ATOMIC ENERGY COMMISSION
G. F. BRAUN & CO.
ENGINEERS
ALHAMBRA, CALIFORNIA
ADDITION & MODIFICATION
SECTIONS SHT 2
D 20742-03

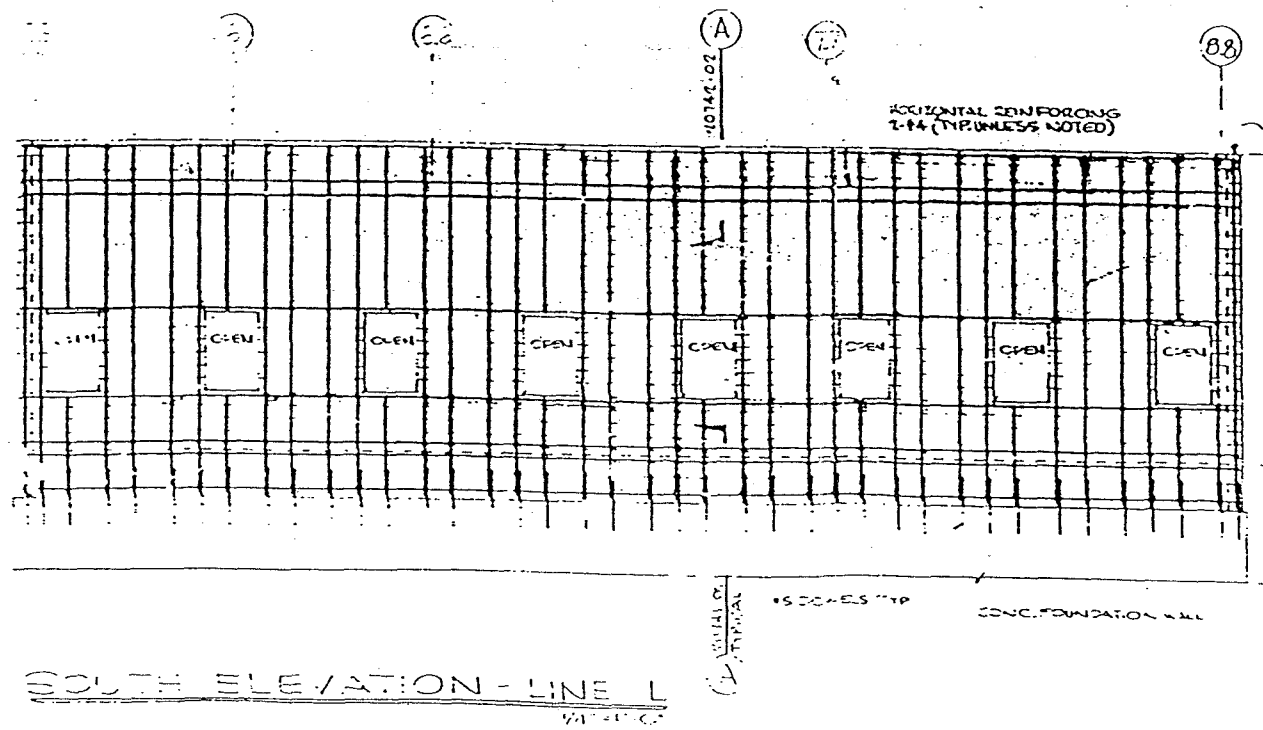


WEST ELEVATION - LINE 5.5
1/4"=1'-0"

EAST ELEVATION - LINE 8.8
1/4"=1'-0"

NORTH ELEVATION - LINE K
1/4"=1'-0"

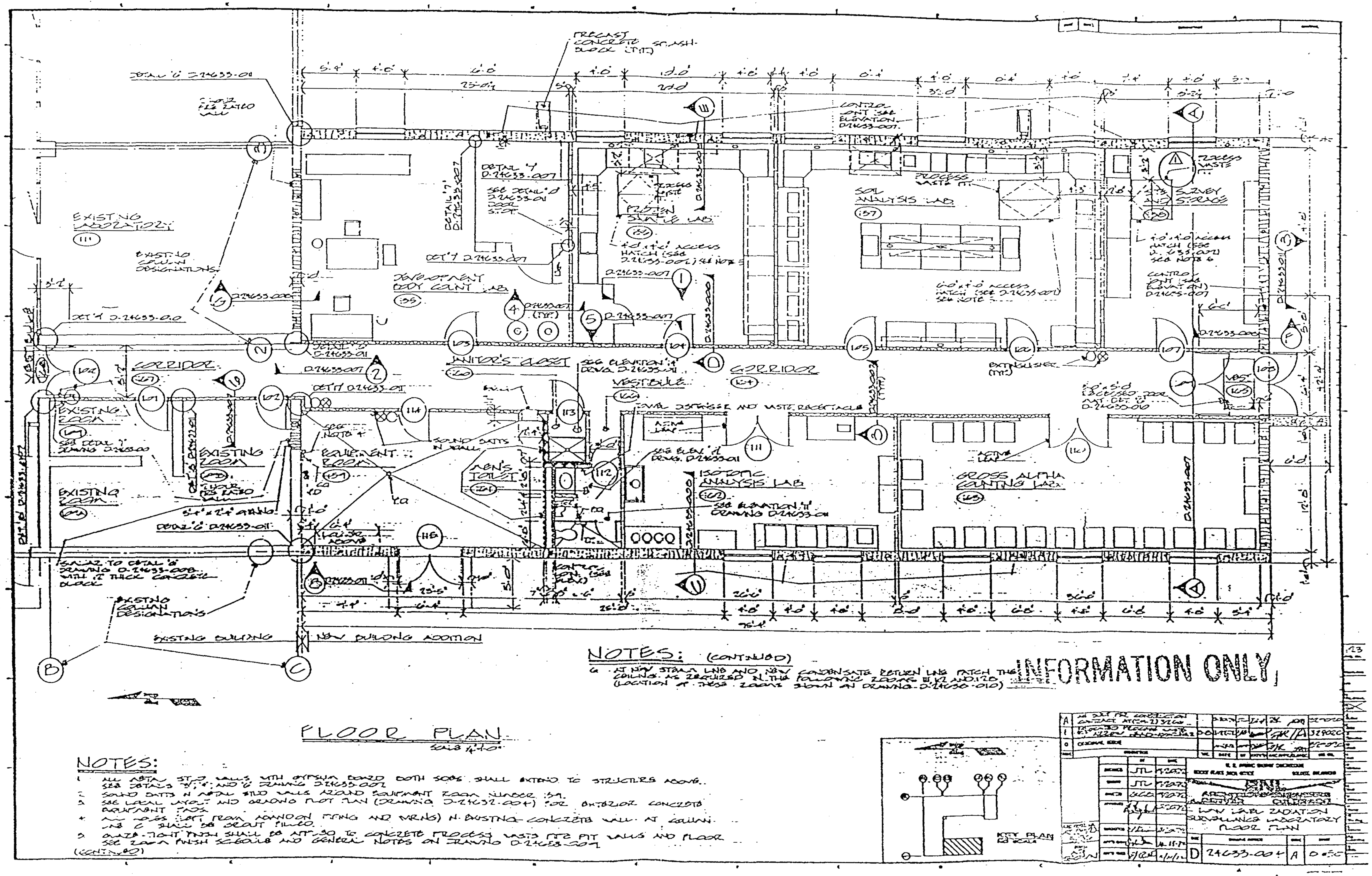
NOTE:
1. FOR SIZE & LOCATION OF DOOR & WINDOW OPENINGS SEE ARCHITECTURAL DRAWINGS 20731-01, 20731-03, 20732-01, 20732-02, 20732-03, & 20736-01
2. SHADED AREAS INDICATE CONCRETE BLOCK CELLS TO BE GROUTED SOLID.

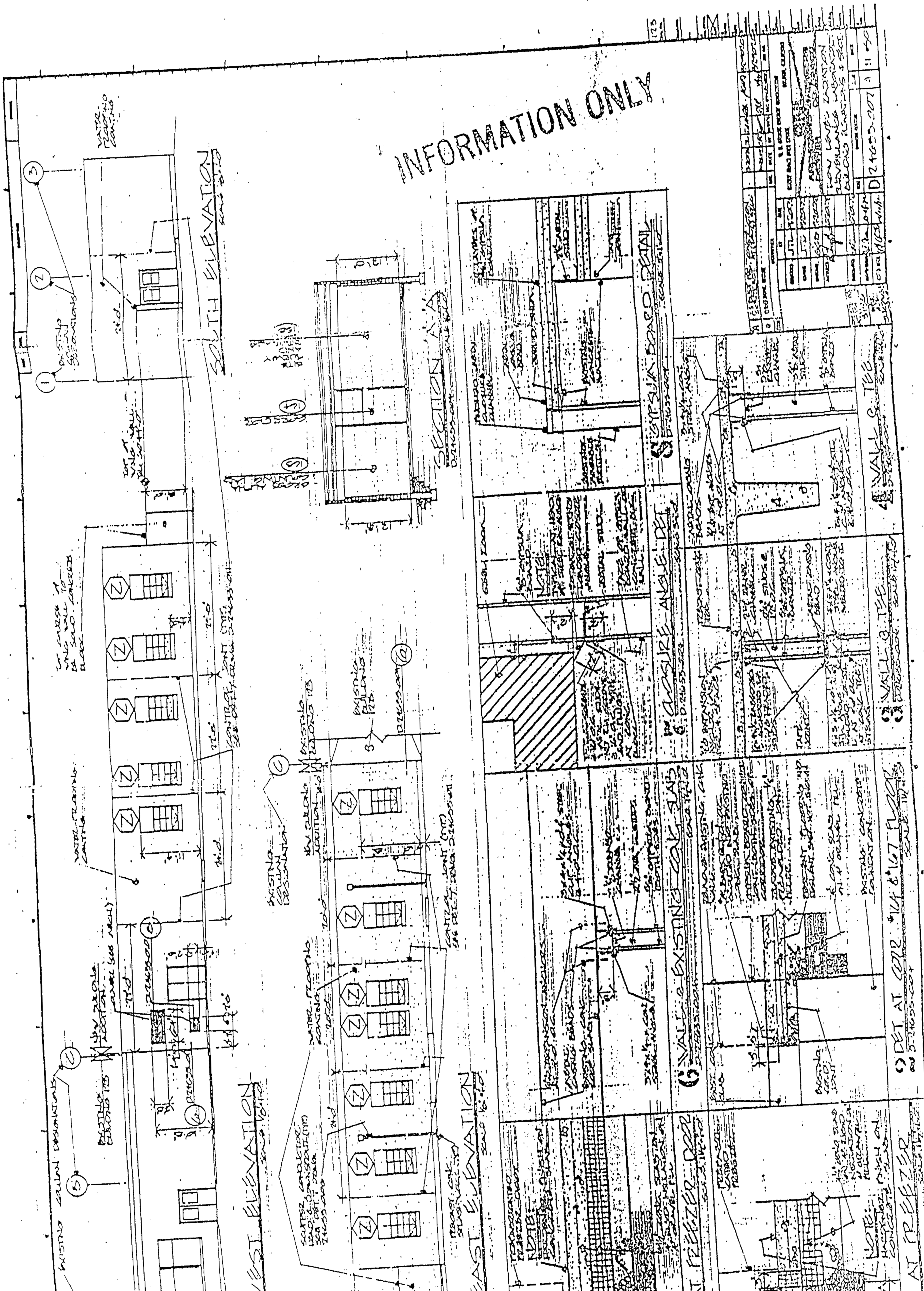


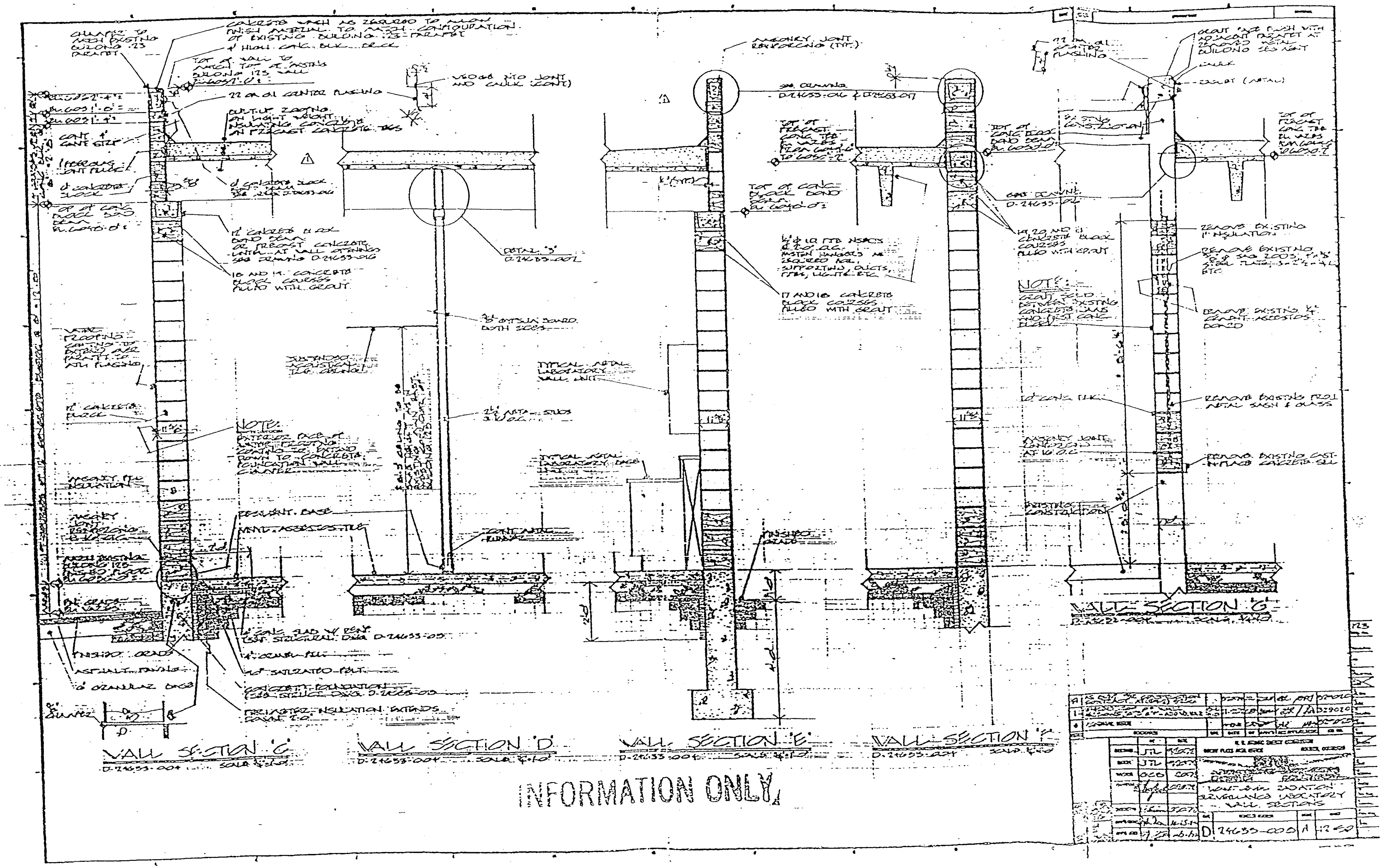
SOUTH ELEVATION - LINE L
1/4"=1'-0"

INFORMATION ONLY

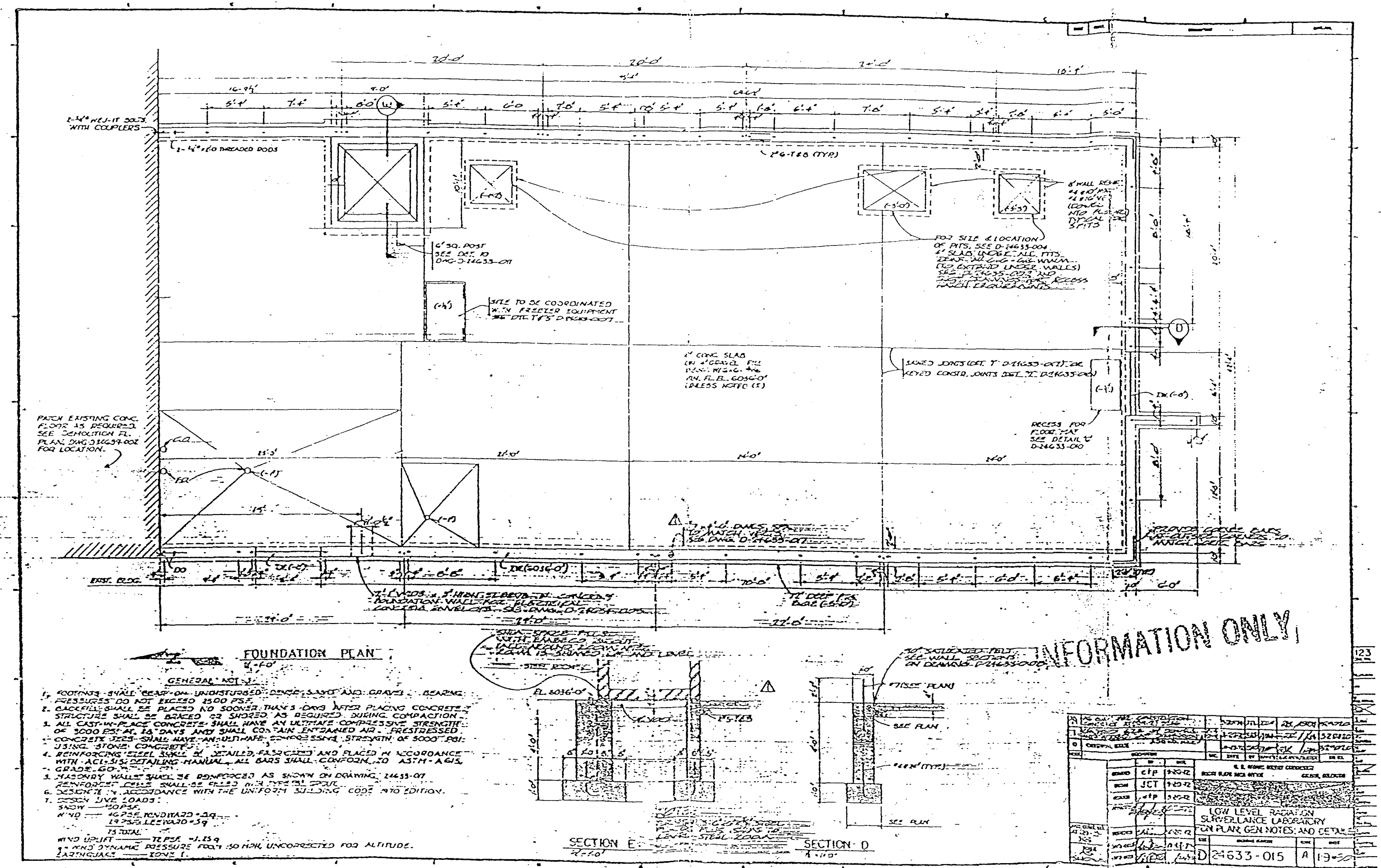
U. S. ATOMIC ENERGY COMMISSION
C. F. BRAUN & CO.
ALHAMBRA, CALIFORNIA
ADDITION & MODIFICATION STRUCTURAL ELEVATIONS
D
20742-04


EXISTING LABORATORY
111
EXISTING COLUMN DESIGNATIONS
DEVELOPMENT BODY COUNT LAB
135
JANITOR'S CLOSET
CORRIDOR
VESTIBULE
SOIL ANALYSIS LAB
157
PROCESS WASTE
SURVEY STORAGE
ISOTOPIC ANALYSIS LAB
GROSS ALPHA COUNTING LAB
MEN'S TOILET
EQUIPMENT ROOM
EXISTING ROOM
EXISTING BUILDING
NEW BUILDING ADDITION
FLOOR PLAN
NOTES:
NOTES: (CONTINUED)
INFORMATION ONLY
KEY PLAN
FLOOR PLAN
D
24633-004
A

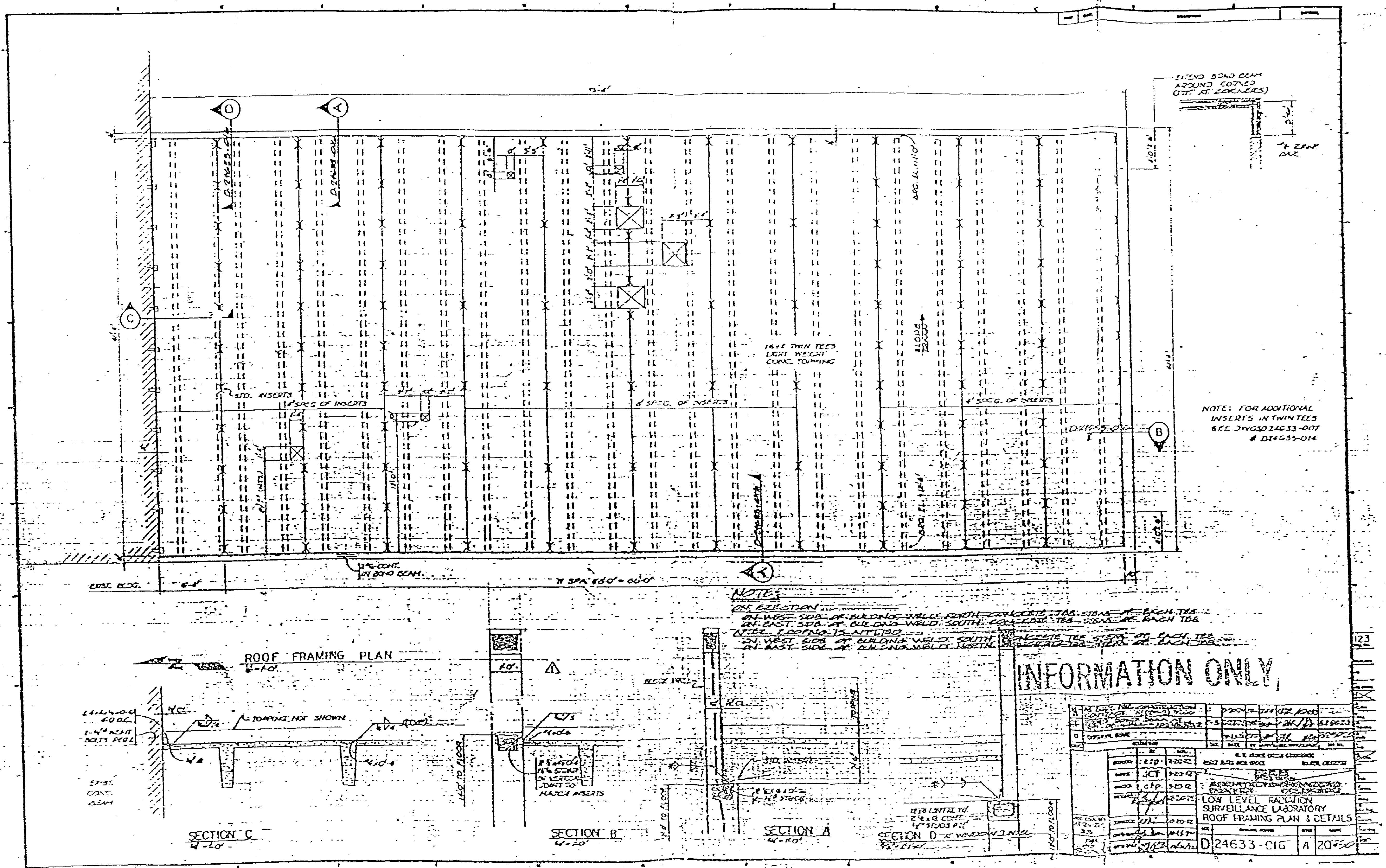

INFORMATION ONLY
SOUTH ELEVATION
WEST ELEVATION
EAST ELEVATION
SECTION A-A
GYPSUM BOARD DETAIL
CLOSURE ANGLE DET
WALL @ EXISTING CLR SLAB
WALL @ TEE
SLAB AT FREEZER DOOR
DET AT DOOR
SLAB AT FREEZER
D 24653-207

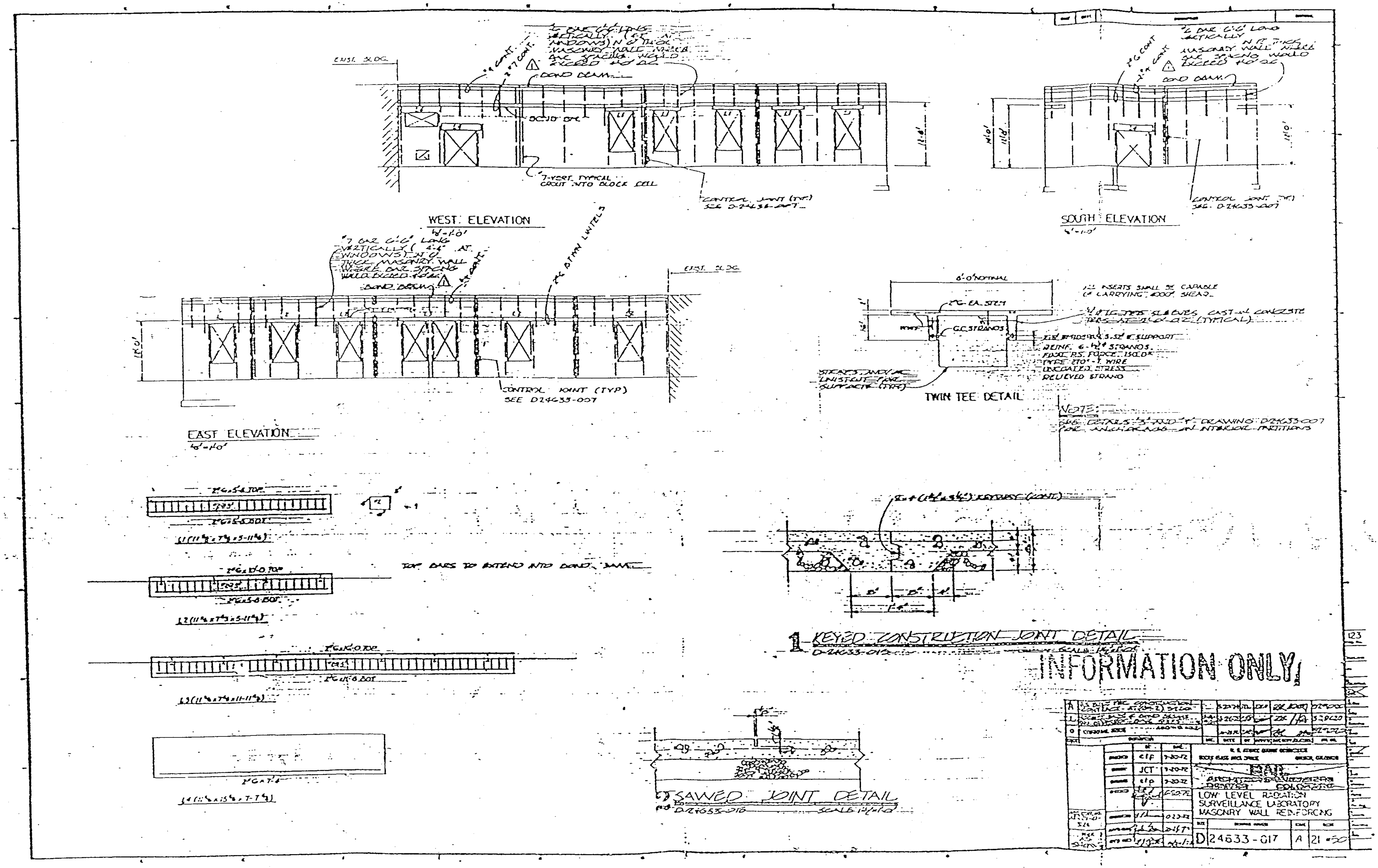


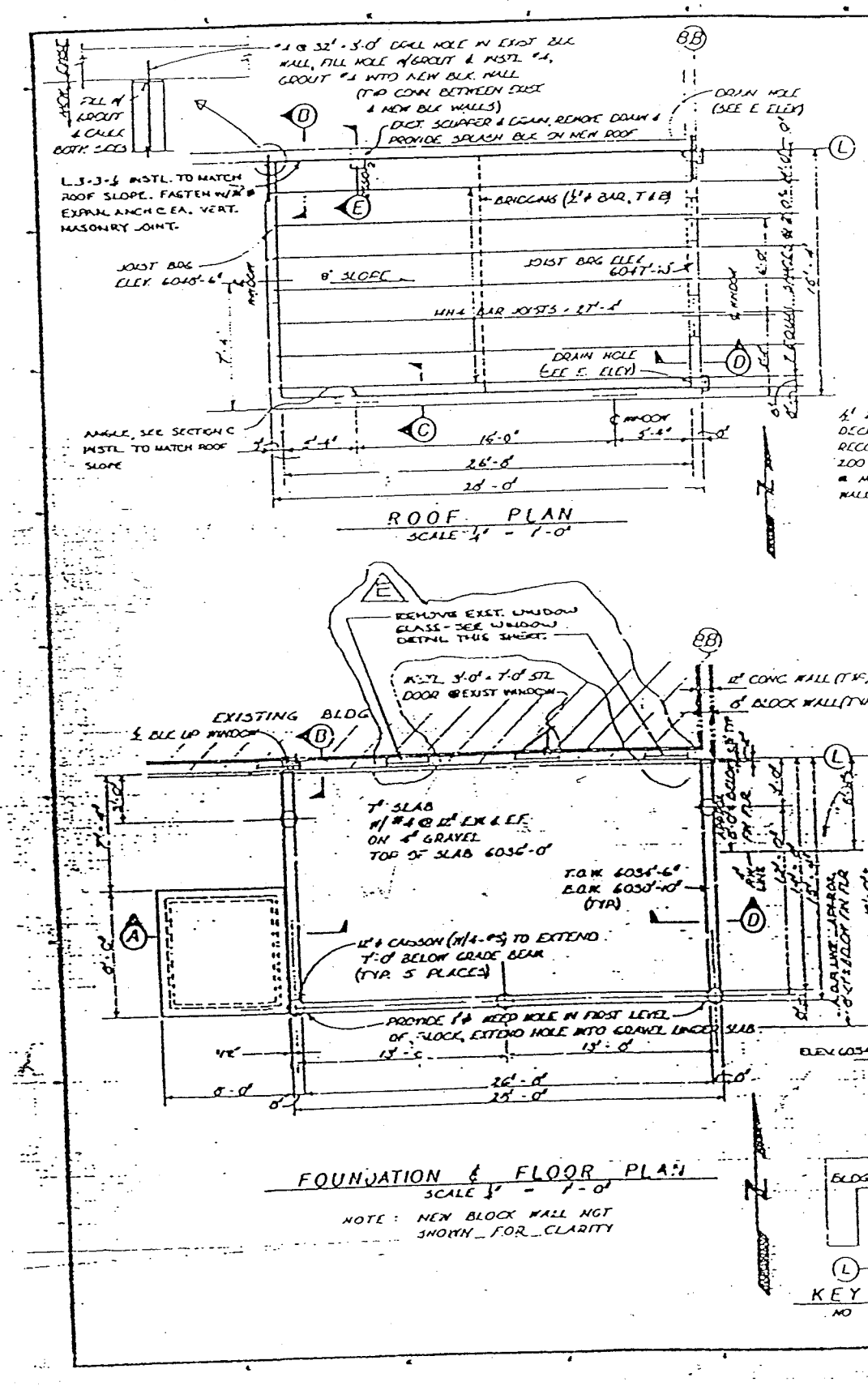
VALL SECTION 'C'
VALL SECTION 'D'
VALL SECTION 'E'
VALL SECTION 'F'
VALL SECTION 'G'
INFORMATION ONLY



FOUNDATION PLAN
GENERAL NOTES
1. FOOTINGS SHALL BEAR ON UNDISTURBED DENSE SAND AND GRAVEL. BEARING PRESSURES DO NOT EXCEED 2500 PSF.
2. BACKFILL SHALL BE PLACED NO SOONER THAN 3 DAYS AFTER PLACING CONCRETE. STRUCTURE SHALL BE BRACED OR SHORED AS REQUIRED DURING COMPACTION.
3. ALL CAST-IN-PLACE CONCRETE SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS AND SHALL CONTAIN ENTRAINED AIR. PRESTRESSED CONCRETE SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF 5000 PSI USING STONE CONCRETE.
4. REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI-315 DETAILING MANUAL. ALL BARS SHALL CONFORM TO ASTM-A615, GRADE 60.
5. MASONRY WALLS SHALL BE REINFORCED AS SHOWN ON DRAWING 24633-07
6. DESIGN IN ACCORDANCE WITH THE UNIFORM BUILDING CODE 1970 EDITION.
7. DESIGN LIVE LOADS:
SNOW — 40 PSF
WIND — 16 PSF WINDWARD
19 PSF LEEWARD
WIND UPLIFT — 12 PSF
WIND DYNAMIC PRESSURE FROM 90 MPH, UNCORRECTED FOR ALTITUDE.
EARTHQUAKE — ZONE 1.
2-3/4" DIA THREADED RODS
6' SQ. POST SEE DET. 10 DWG D-24633-07
SIZE TO BE COORDINATED WITH FREEZER EQUIPMENT
4" CONC SLAB ON 4" GRAVEL FILL
SAWED JOINTS
KEYED CONSTR. JOINTS
FOR SIZE & LOCATION OF PITS, SEE D-24633-004
RECESS FOR FLOOR MAT SEE DETAIL D-24633-010
PATCH EXISTING CONC. FLOOR AS REQUIRED. SEE DEMOLITION FL. PLAN DWG D-24633-002 FOR LOCATION.
EXIST. BLDG.
EL. 6036'-0"
SEE PLAN
SECTION E
SECTION D
INFORMATION ONLY
LOW LEVEL RADIATION SURVEILLANCE LABORATORY
FOUNDATION PLAN, GEN NOTES AND DETAILS
D 24633-015
A
19-50
123


ROOF FRAMING PLAN
SECTION C
SECTION B
SECTION A
SECTION D
NOTES:
16x8 TWIN TEES LIGHT WEIGHT CONC. TOPPING
STD. INSERTS
NOTE: FOR ADDITIONAL INSERTS IN TWIN TEES SEE DWGS D24633-007 & D24633-014
EXTEND BOND BEAM AROUND CORNER (TYP. AT CORNERS)
EXIST. BLDG.
TOPPING NOT SHOWN
INFORMATION ONLY
LOW LEVEL RADIATION SURVEILLANCE LABORATORY ROOF FRAMING PLAN & DETAILS
D 24633-C16 A


WEST ELEVATION
SOUTH ELEVATION
EAST ELEVATION
TWIN TEE DETAIL
CONTROL JOINT (TYP) SEE D24633-007
1 KEYED CONSTRUCTION JOINT DETAIL
SAWED JOINT DETAIL
INFORMATION ONLY
LOW LEVEL RADIATION
SURVEILLANCE LABORATORY
MASONRY WALL REINFORCING
D 24633-017
A
21



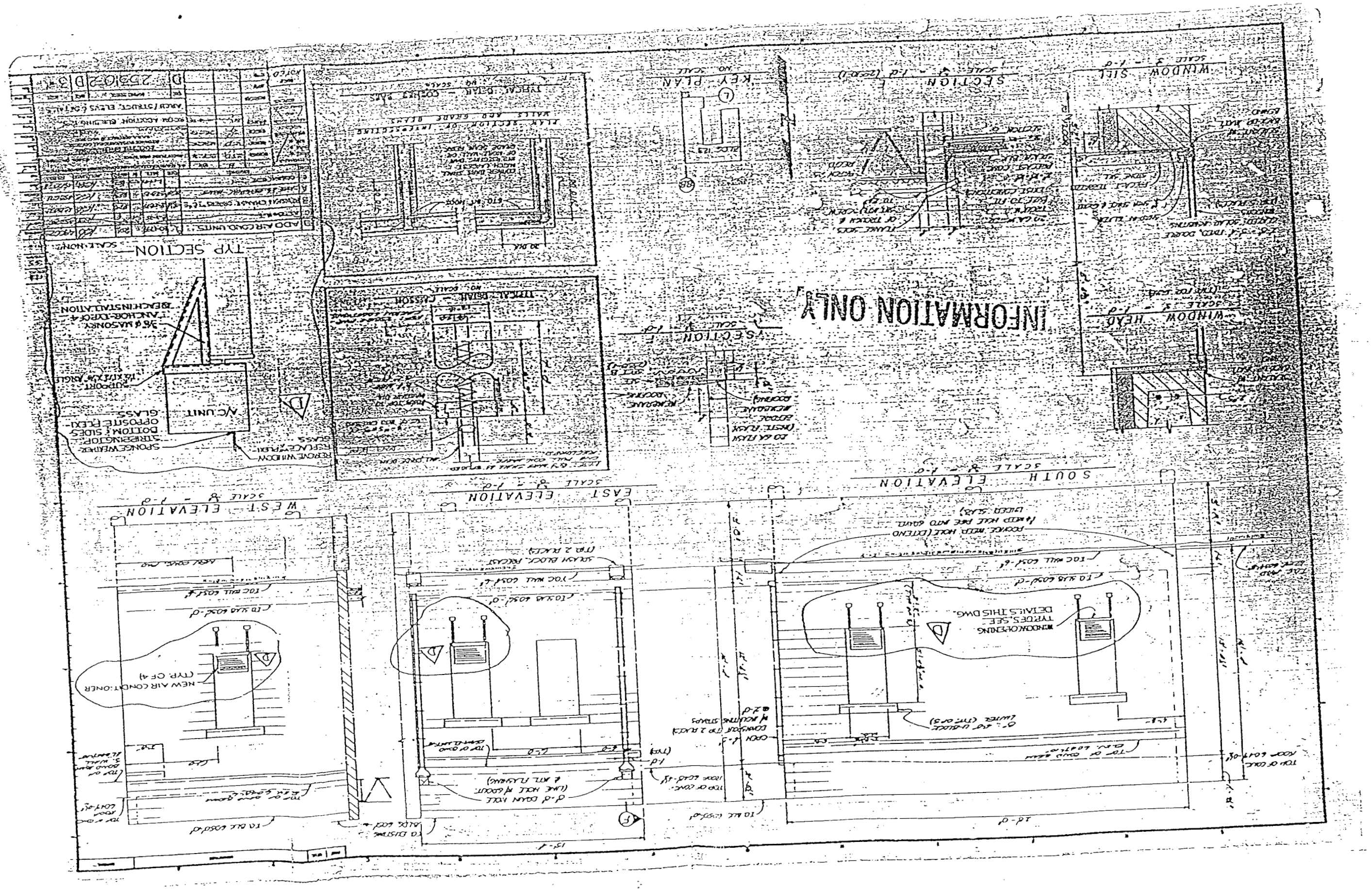
E	ADD TWO WINDOW FANS				165	450072
D	ADD AIR COND. UNITS				165	450071
C	ASC-BUILT				165	450071
B	REVISION CHANGE ORDER #2				165	450071
A	ISSUE AS ORIGINAL ISSUE				165	450071
0	ORIGINAL ISSUE				165	450071

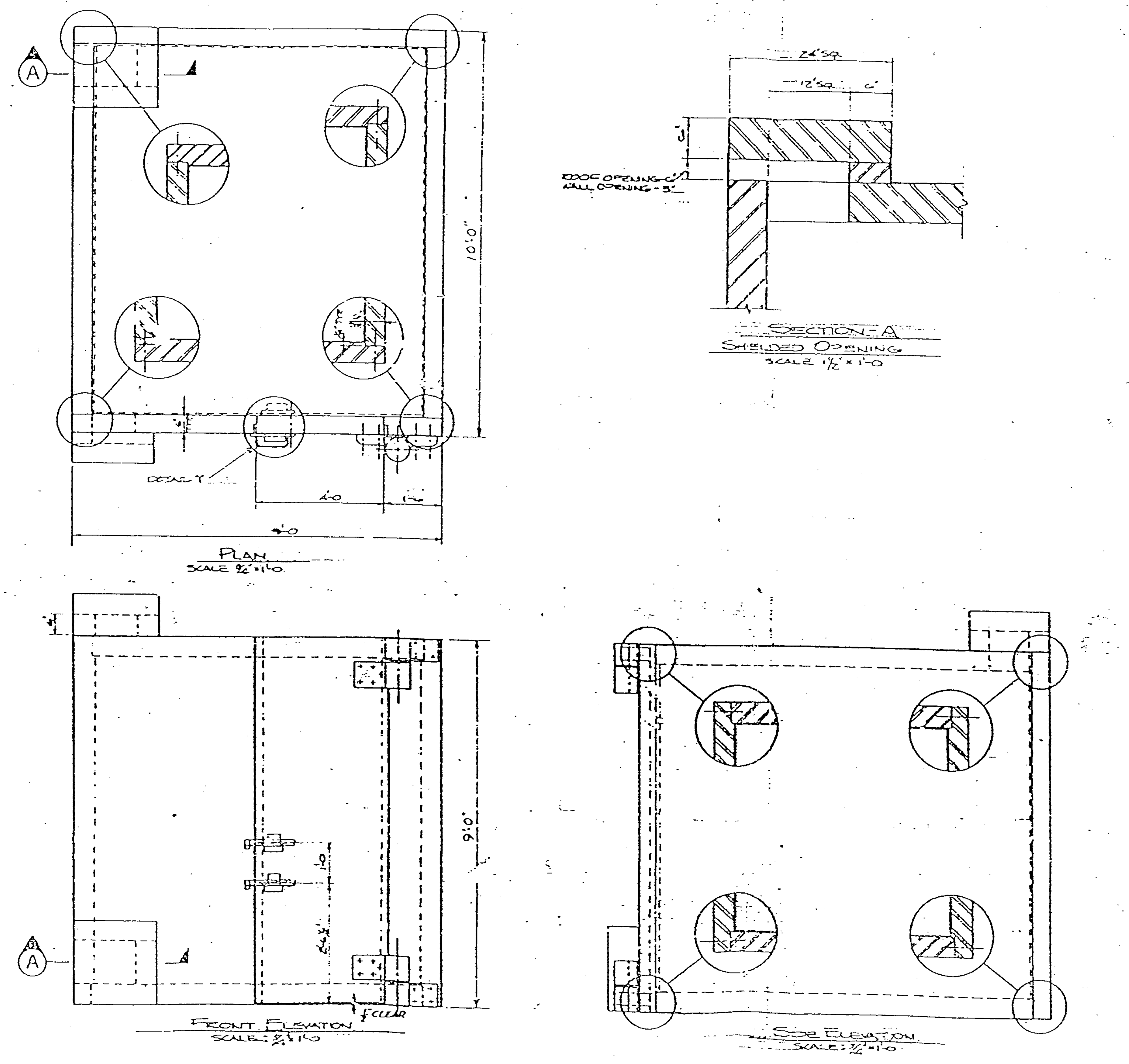
ROOM ADDITION BUILDING 123

ARCH/STRUCT. PLANS & DETAILS

D 25510-1 E 2

123
165


INFORMATION ONLY
SOUTH ELEVATION
EAST ELEVATION
WEST ELEVATION
TYP SECTION
KEY PLAN
WINDOW SILL
WINDOW HEAD
SECTION
TYPICAL PLAN
A/C UNIT
NEW AIR CONDITIONER (TYP. OF 4)
WINDOW OPENING TYP. OF 5. SEE DETAILS THIS DWG.



GENERAL NOTES

STEEL ROOM SHALL BE GOVERNMENT FURNISHED EQUIPMENT, TO BE ERECTED IN THE FIELD BY THE CONTRACTOR.

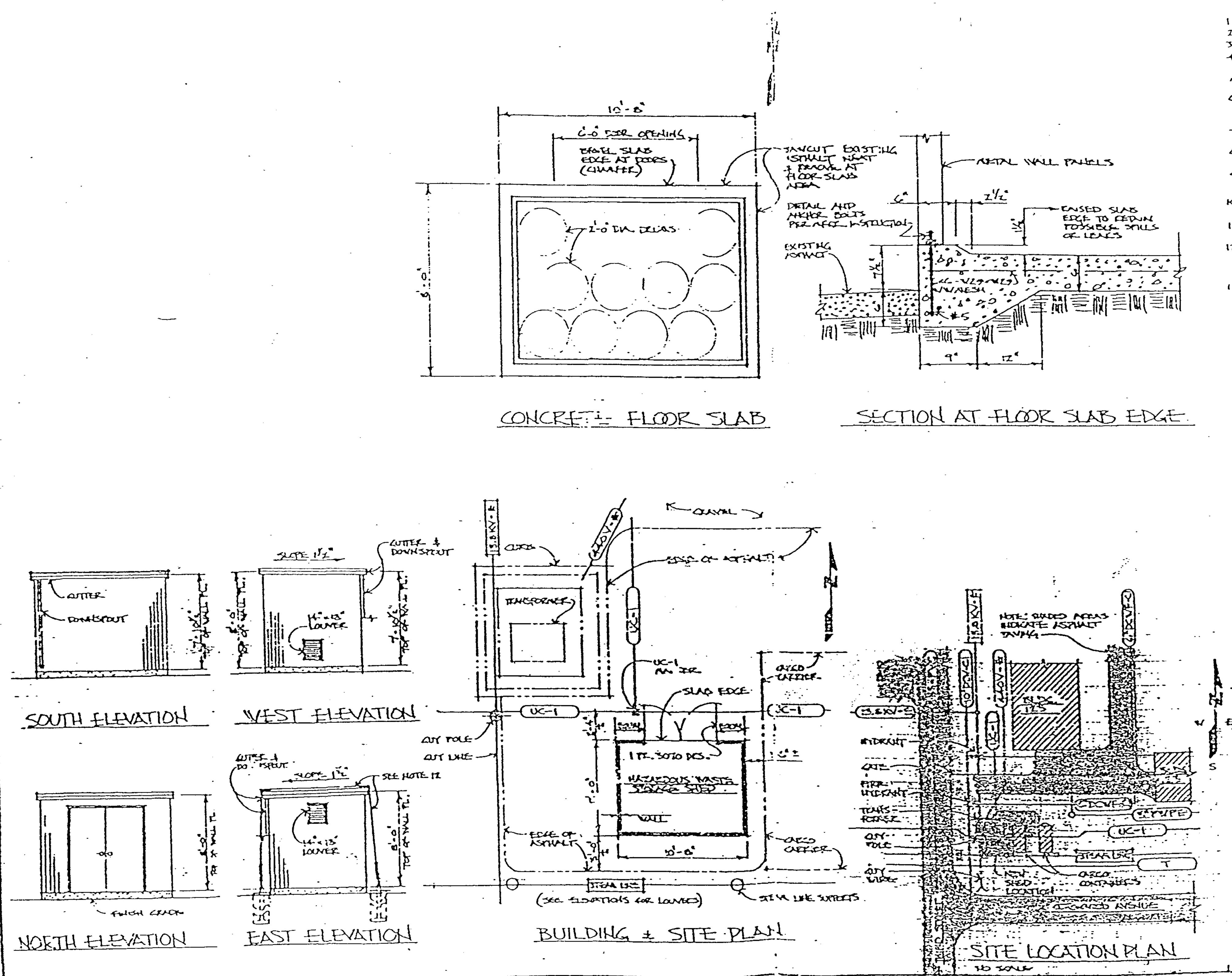
1. THE CONTRACTOR SHALL FURNISH & INSTALL A LINING ON ALL INTERIOR SURFACES, CONSISTING OF 1/8 THK. LEAD, 0.024-0.0001 IN. TIN & 0.010-0.0001 IN. ZINC LISTED RESPECTIVELY FROM THE STEEL SURFACE. THE LINING SHALL BE ATTACHED TO ALL SURFACES BY MECHANICAL MEANS IN ACCORDANCE WITH THE SPECIFICATIONS.

2. THE CONTRACTOR SHALL FURNISH & INSTALL ALL ELECTRICAL POWER & LIGHTING PER DWG. D-24634-007

3. THE CONTRACTOR SHALL BOLT ALL STEEL PLATES TOGETHER. ALL STEEL PLATES SHALL BE SECURED AT JOINTS WITH 1 INCH DIAMETER x 7" LONG BOLTS SPACED A MAXIMUM OF 18 INCHES CENTER TO CENTER.

4. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL HVAC PER DRAWING D-24630-004

INFORMATION ONLY



NOTES

1. ------- INDICATES EXISTING
2. _______ INDICATES NEW
3. ALL UTILITIES SHOWN ARE EXISTING
4. ALL BOLTS 3/4" φ - A307 GRADE UNLESS NOTED OTHERWISE AT FLOOR SLAB
5. STEEL TO BE FABRICATED PER AISC LATEST EDITION
6. ALL CONCRETE SHALL BE MIXED, PLACED & CURED ACCORDING TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-83
7. ALL REINFORCING SHALL BE ACIS GRADE 60
8. COMPACT SUBGRADE UNDER NEW SLAB TO 95% MODIFIED PROCTOR
9. ALL DETAILS & DESIGN TO BE REVIEWED AND APPROVED BY BUYER
10. (underground symbol) DENOTES UNDERGROUND
11. (above ground symbol) DENOTES ABOVE GROUND
12. WIND RESTRAINTS: (OPTIONAL)
    a. CABLES - STEEL WITH WOOD STAKES
    b. TIE DOWNS FOR TRAILERS TYPE SC-103
13. IF WIND CRITERIA IS MET PER SPECIFICATION 2.? ?.3 NOTE 12 NOT REQ'D.

INFORMATION ONLY!

AS BUILT 1-5-87
8-24-87

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS AREA OFFICE GOLDEN, COLORADO
Rockwell International Rocky Flats Plant

HAZARDOUS WASTE STORAGE SHED
BUILDING ITS SITE

D 38046-001 B 1 of 1